

PROPOSED

NAVY TRAINING SYSTEM PLAN

FOR THE

AIM-9X

SIDEWINDER MISSILE SYSTEM

N88-NTSP-A-50-9601A/P

AUGUST 2000

AIM-9X SIDEWINDER MISSILE SYSTEM

EXECUTIVE SUMMARY

This Navy Training System Plan (NTSP) has been developed in accordance with Office of the Chief of Naval Operations Instruction (OPNAVINST) 1500.76 to identify the life-cycle, manpower, personnel, and training requirements associated with the AIM-9X Sidewinder Missile.

The AIM-9X is being developed as a short-range air-to-air missile with enhanced target acquisition capabilities, using the existing AIM-9M Sidewinder Missile warhead, rocket motor and fuze components in combination with a new seeker/guidance and jet vane control section. The mission of the AIM-9X is to detect, home-in, intercept, and destroy enemy aircraft. The AIM-9X acquisition program is currently in the Engineering and Manufacturing Development (E&MD) phase of the Weapon System Acquisition Process. Initial Operational Capability (IOC) is anticipated in the third quarter of Fiscal Year (FY) 03.

The maintenance concept for the AIM-9X is based on an overall objective to assure that All-Up-Round (AUR) missiles are available to fulfill commitments of operational activities, and to provide the means to restore unserviceable missiles to serviceable condition with minimum downtime. Maintenance requirements are allocated to three levels of maintenance as defined in the Naval Ordnance Maintenance Management Program (NOMMP), OPNAVINST 8000.16 (series).

The AIM-9X will not alter the operator (pilot) manning requirements at any organizational activity (aircraft squadron). No new skills are required for operation of the AIM-9X. The skills required to operate the AIM-9X are compatible with the skills required to operate the AIM-9M, therefore no new Naval Officer Billet Code or Military Occupational Specialty (MOS) is required.

The AIM-9X will not alter the manning requirements at any organizational or intermediate level maintenance activity. No new skills are required for maintenance of the AIM-9X at the organizational- or intermediate levels of maintenance. The skills required to perform maintenance on the AIM-9X are compatible with existing skills required to perform maintenance on the AIM-9M and AIM-120; therefore, no new Naval Enlisted Classifications (NECs) or MOSs are required. Raytheon Missile Systems (RMS) will provide AUR and component-level maintenance throughout the missile's life cycle. Therefore, the AIM-9X will not alter the manning requirements at organic AUR and component-level maintenance activities.

Existing operator and maintenance training courses for the AIM-9M will be modified to include AIM-9X information. These modifications will incorporate AIM-9X information into course curricula without changing course lengths or student billets.

AIM-9X SIDEWINDER MISSILE SYSTEM

TABLE OF CONTENTS

	Page
Executive Summary.....	i
List of Acronyms.....	iii
Preface.....	viii
 PART I - TECHNICAL PROGRAM DATA	
A. Title-Nomenclature-Program	I-1
B. Security Classification	I-1
C. NTSP Principals	I-1
D. System Description.....	I-1
E. Developmental Test and Operational Test.....	I-2
F. Aircraft and/or Equipment/System/Subsystem Replaced	I-5
G. Description of New Development	I-5
H. Concepts	I-11
I. On-Board (In-Service) Training	I-28
J. Logistics Support	I-31
K. Schedules	I-34
L. Government Furnished Equipment and Contractor Furnished Equipment Training Requirements.....	I-35
M. Related NTSPs and Other Applicable Documents	I-35
 PART II - BILLET AND PERSONNEL REQUIREMENTS	II-1
 PART III - TRAINING REQUIREMENTS.....	III-1
 PART IV - TRAINING LOGISTICS SUPPORT REQUIREMENTS.....	IV-1
 PART V - MPT MILESTONES.....	V-1
 PART VI - DECISION ITEMS/ACTION REQUIRED	VI-1
 PART VII - POINTS OF CONTACT	VII-1

AIM-9X SIDEWINDER MISSILE SYSTEM

LIST OF ACRONYMS

ACMI	Air Combat Maneuvering Instructor
ACTI	Air Combat Tactics Instructor
AFD	Arm and Fire Device
AIMD	Aircraft Intermediate Maintenance Department
ALSP	Acquisition Logistics Support Plan
AMRAAM	Advanced Medium-Range Air-to-Air Missile
AMTCS	Aviation Maintenance Training Continuum System
AO	Aviation Ordnanceman
AOTD	Active Optical Target Detector
AT	Aviation Electronics Technician
AUR	All-Up-Round
AWL	Advanced Weapons Laboratory
BIT	Built-In-Test
CAI	Computer Aided Instruction
CAS	Control Actuation System
CATM	Captive Air Training Missile
CBT	Computer Based Training
CCRP	Captive Carriage Reliability Program
CEST	Classroom Explosive Ordnance Disposal System Trainer
CIN	Course Identification Number
CINCLANTFLT	Commander in Chief, Atlantic Fleet
CINCPACFLT	Commander in Chief, Pacific Fleet
CMBRE	Common Munitions BIT Reprogramming Equipment
CMC	Commandant of the Marine Corps
CMi	Computer Managed Instruction
CNET	Chief of Naval Education and Training
CNO	Chief of Naval Operations
COMNAVAIRRESFOR	Commander Naval Air Reserve Force
CRALTS	Common Racks And Launcher Test Set
CV	Aircraft Carrier
CVN	Aircraft Carrier, Nuclear
CWTPI	Conventional Weapon Technical Proficiency Inspection
DAB	Defense Acquisition Board
DATM	Dummy Air Training Missile
DEFTACI	Defensive Tactics Instructor

AIM-9X SIDEWINDER MISSILE SYSTEM

LIST OF ACRONYMS

DEM/VAL	Demonstration and Validation
DT	Development Test
E&MD	Engineering and Manufacturing Development
ECP	Engineering Change Proposal
EDM	Engineering Development Model
EOA	Early Operational Assessment
EOD	Explosive Ordnance Disposal
EODTEU	Explosive Ordnance Disposal Training and Evaluation Unit
ESAD	Electronic Safe and Arm Device
FMS	Foreign Military Sales
FPA	Focal Plane Array
FREST	Fleet Replacement Enlisted Skills Training
FRS	Fleet Replacement Squadron
FY	Fiscal Year
GS	Guidance Section
HMSC	Hughes Missile Systems Company
HSIP	Human Systems Integration Plan
ICW	Interactive Courseware
ILSP	Integrated Logistics Support Plan
IOC	Initial Operational Capability
IPT	Integrated Product Team
IR	Infrared
JDAM	Joint Direct Attack Munition
JHMCS	Joint Helmet Mounted Cueing System
JRB	Joint Reserve Base
JSOW	Joint Stand-Off Weapon
LRIP	Low-Rate Initial Production
MAD	Marine Aviation Detachment
MALS	Marine Aviation Logistics Squadron
MAP	Munitions Application Program
MATMEP	Marine Aviation Training Management Evaluation Program
MAWTS	Marine Aviation Weapons and Tactics Squadron

AIM-9X SIDEWINDER MISSILE SYSTEM

LIST OF ACRONYMS

MCAS	Marine Corps Air Station
MCCDC	Marine Corps Combat Development Command
MCO	Marine Corps Order
MOS	Military Occupational Specialty
MPT	Manpower, Personnel, and Training
MSD	Material Support Date
MTIP	Maintenance Training Improvement Program
MTU	Maintenance Training Unit
NA	Not Applicable
NAMTRAGRU DET	Naval Air Maintenance Training Group Detachment
NAMTRAU	Naval Air Maintenance Training Unit
NAS	Naval Air Station
NAST	Naval Air Systems Team
NATTC	Naval Air Technical Training Center
NAVAIRSYSCOM	Naval Air Systems Command
NAVPERSCOM	Naval Personnel Command
NAVSCOLEOD	Navy EOD School
NAVWPNTSTRON	Naval Weapons Test Squadron
NAWCAD	Naval Air Warfare Center Aircraft Division
NAWCWD	Naval Air Warfare Center Weapons Division
NAWMU	Naval Airborne Weapons Maintenance Unit
NCEA	Non-Combat Expenditure Allowance
NEC	Navy Enlisted Classification
NOMMP	Naval Ordnance Maintenance Management Program
	OPNAVINST 8000.16
NS	Naval Station
NSAWC	Naval Strike and Air Warfare Center
NTSP	Navy Training System Plan
OA	Operational Assessment
OATMS	OPNAV Aviation Training Management System
OPEVAL	Operational Evaluation
OPNAV	Office of the Chief of Naval Operations
OPNAVINST	Office of the Chief of Naval Operations Instruction
OPO	OPNAV Principal Official
OPTEVFOR	Operational Test and Evaluation Force
OT	Operational Test

AIM-9X SIDEWINDER MISSILE SYSTEM

LIST OF ACRONYMS

PC	Personal Computer
PCMCIA	Personal Computer Memory Card International Association
PDA	Principal Development Agency
PDM	Program Document Management (system)
PEO	Program Executive Officer
PEST	Practical Explosive Ordnance Disposal System Trainer
PMA	Program Manager, Air
PRM	Production Representative Model
PRMI	Production Representative Model Instrumented
P/SS	Propulsion and Steering Section
RFOU	Ready for Operational Use
RFT	Ready For Training
RMS	Raytheon Missile Systems
RSP	Render Safe Procedure
SAMP	Single Acquisition Management Plan
SCTV	Separation and Control Test Vehicle
SEAM	Sidewinder Expanded Acquisition Mode
SFARP	Strike Fighter Advanced Readiness Program
SFTI	Strike Fighter Tactics Instructor
SFTP	Strike Fighter Training Program
SFTS	Strike Fighter Training System
SFWE	Strike Fighter Weapons Employment
SFWS	Strike Fighter Weapons School
SFWSL	Strike Fighter Weapons School, Atlantic
SFWSP	Strike Fighter Weapons School, Pacific
SFWT	Strike Fighter Weapons and Tactics
T&E	Test and Evaluation
TBD	To Be Determined
TD	Training Device
TECHEVAL	Technical Evaluation
TEMP	Test and Evaluation Master Plan
TOFT	Tactics and Operational Flight Trainer
TPS	Test Program Set
TYCOM	Type Commander
USMC	United States Marine Corps

AIM-9X SIDEWINDER MISSILE SYSTEM

LIST OF ACRONYMS

USN	United States Navy
VFA	Fighter Attack Squadron
VMAT	Marine Attack Training Squadron
VMFA	Marine Fighter Attack Squadron
VMFAT	Marine Fighter Attack Training Squadron
VX	Air Test and Evaluation Squadron
WSO	Weapon and Sensor Officer
WTI	Weapons and Tactics Instructor
WTT	Weapons Tactics Trainer

AIM-9X SIDEWINDER MISSILE SYSTEM

PREFACE

This Proposed Navy Training System Plan (NTSP) for the AIM-9X Sidewinder Missile is an update of the approved AIM-9X NTSP dated May 1998. It complies with Office of the Chief of Naval Operations Instruction (OPNAVINST) 1500.76 and the guidelines set forth in the Navy Training Requirements Documentation Manual (NTRDM), P-751-1-9-97.

The major changes and updates to this NTSP consist of:

- PART I Updated to reflect progress made during the design, development, and testing of the AIM-9X.
- PART II Recalculated to depict current billet requirements of fleet support units through Fiscal Year (FY) 04.
- PART III In addition to reflecting the changes mentioned above, this part has been updated by recalculating chargeable student billets through FY04.
- PART IV Updated to refine the training and training logistics support requirements.
- PART V Updated to reflect programmatic and technical schedule changes.
- PART VI Updated to include open action/watch items.
- PART VII Updated to reflect current Points of Contact.

PART I - TECHNICAL PROGRAM DATA

A. TITLE-NOMENCLATURE-PROGRAM

- 1. Title-Nomenclature-Acronym. Sidewinder Missile System - AIM-9X.
- 2. Program Element. 0603715D

B. SECURITY CLASSIFICATION

- 1. System Characteristics Secret
- 2. Capabilities..... Secret
- 3. Functions Confidential

C. NTSP PRINCIPALS

OPNAV Principal Official (OPO) Program Sponsor	CNO (N88)
OPO Resource Sponsor.....	CNO (N880C7)
Marine Corps Program Sponsor	CMC (ASL-30)
Developing Agency	PEO (T) (PMA259)
Training Agency.....	CINCLANTFLT CINCPACFLT CNET COMNAVAIRRESFOR NSAWC
Training Support Agency	NAVAIRSYSCOM (PMA205) COMNAVAIRRESFOR (N3W)
Manpower and Personnel Mission Sponsor.....	CNO (N12) NAVPERSCOM (PERS-4, PERS-404)
Director of Naval Training	CNO (N7)
Commander, Reserve Program Manager.....	COMNAVAIRRESFOR (N3W)
Marine Corps Total Force Structure	MCCDC (C-5352)

D. SYSTEM DESCRIPTION

1. Operational Uses. The AIM-9X Sidewinder Missile, hereafter referred to as the AIM-9X, is a supersonic, short-range, air-to-air missile with enhanced target acquisition capabilities.

The AIM-9X will be flown on active duty and Reserve Navy and Marine Corps fighter and attack aircraft, in both offensive and defensive counter-air missions as a highly maneuverable, launch and leave missile with passive Infrared (IR) guidance. It will provide full day and night capability, resistance to countermeasures, increased off-boresight angle acquisition and launch capability, increased maneuverability, and improved target acquisition over the current inventory AIM-9M.

2. Foreign Military Sales. The AIM-9X program is a joint United States Navy (USN) and United States Air Force procurement, with the USN designated as the lead service. Other versions of the AIM-9 (series) Sidewinder have been the subject of Foreign Military Sales (FMS) activity. Multiple countries have approached the AIM-9X program for potential sales.

E. DEVELOPMENTAL TEST AND OPERATIONAL TEST. Naval Air Systems Command (NAVAIRSYSCOM) Air-to-Air Missiles, Program Manager, Air (PMA 259) is the acquisition and development agency for AIM-9X. Table 1 lists the Engineering and Manufacturing Development (E&MD) phase Test and Evaluation (T&E) schedule (Source: Test and Evaluation Master Plan (TEMP) Revision C).

Table I-1. AIM-9X E&MD T&E Schedule.

<u>Test Phase</u>	<u>Period</u>
Developmental Test (DT)-IIA	Jan 97 - Aug 98
DT-IIB/C	Sep 98 - Dec 00
Operational Test (OT)-IIA	Sep 99 - Jul 00
DT-IID Technical Evaluation (TECHEVAL)	Dec 00 - Aug 01
Captive Carriage Reliability Program (CCRP)	May 00 - Nov 02
DT Assist	Aug 00 - Aug 01
OT-IIB Operational Evaluation (OPEVAL)	Dec 01 - Nov 02

1. Developmental Test and Operational Test Not Completed. The AIM-9X T&E program is currently in the DT-IIB/C test and CCRP phases. The AIM-9X T&E program completed DT-IIA in August 1998, began DT-IIB/C in September 1998, completed OT-IIA Operational Assessment (OA) in July 2000, and began CCRP in July 2000. The DT-IID TECHEVAL, DT Assist, and OT-IIB OPEVAL phases will follow using the F/A-18C/D aircraft to assess and verify operational effectiveness, supportability, and suitability of the AIM-9X missile for fleet introduction. TECHEVAL will be performed in FY01 by the Sidewinder Program Office using the F/A-18 Advanced Weapons Laboratory (AWL) and the Naval Weapons Test Squadron (NAVWPNTSTRON) at the Naval Air Warfare Center Weapons Division (NAWCWD), China Lake, California. The Operational Test and Evaluation Force (OPTEVFOR), using the Fleet's Air Test and Evaluation Squadron (VX)-9, will perform OPEVAL under actual fleet conditions in FY02. Schedules for follow-on integration with other aircraft are in development.

2. Developmental Test Completed

a. Developmental Test-I. During the AIM-9X Demonstration and Validation Phase (DEM/VAL), the Government conducted an Early Operational Assessment (EOA) of the BOXOFFICE (II) airframe. Wind tunnel tests were performed and 14 firings were conducted. Additionally, the Government performed an EOA on the Advanced Short Range Air-to-Air Missile (ASRAAM) as part of a mandatory Foreign Comparative Test requirement. As part of the two-contract DEM/VAL and DT-I phases of the program, contractors conducted laboratory demonstrations and ground-to-air and captive carry flight tests using seeker hardware and trade studies. Laboratory demonstrations concentrated on detector/non-uniformity compensation, cooling and gimbal/platform stabilization. Ground-to-air and captive carry tests concentrated on signal processing, which gave each contractor an opportunity to mature algorithms and hardware, and make improvements in Infrared Counter-Counter Measures (IRCCM) and acquisition performance in an iterative series of test events.

b. Developmental Test-II. In January 1997, the E&MD contract was awarded to Hughes Missile System Company (HMSC), which has since become Raytheon Missile System (RMS).

(1) Developmental Test-IIA. The DT-IIA phase began in January 1997 with the award of the E&MD contract. In May 1997, the first flight of the DT-IIA phase was flown, which was a captive carry flight to perform a system checkout. The DT-IIA phase continued captive carry flight tests through August 1998, focusing on seeker acquisition, tracking, guidance and autopilot algorithms, and the aircraft interface. During this phase of testing, RMS supported loading operations, while pilots flew scene/target image-gathering missions. AIM-9X training for operation and maintenance tasks were not required.

(2) Developmental Test-IIB/C. The DT-IIB/C phase began September 1998 and will continue through December 2000. To date numerous Separation and Control Test Vehicles (SCTVs) have been launched, each flying pre-programmed flight paths to demonstrate airframe safe separation, aerodynamic control, and stability. SCTVs do not contain seeker electronics. In June 1999, the first Engineering Development Model (EDM) was launched successfully against a QF-4 target to demonstrate seeker acquisition, tracking, and guidance performance in blue sky. In September 1999, the second EDM was launched successfully against a QF-4 target to demonstrate seeker acquisition, tracking, and guidance performance in desert background. In December 1999, the third EDM was launched successfully against a QF-4 target to demonstrate performance in a two-circle engagement. In March 2000, the fourth EDM was launched successfully against a QF-4 target to demonstrate performance in a one-circle engagement with countermeasures. In June 2000, the first Production Representative Model (PRM) was launched successfully against a QF-4 target to demonstrate performance against a target in the beam with countermeasures. PRM launches will continue through DT-IIB/C.

During DT-IIB/C, RMS developed AIM-9X Theory of Operation, F/A-18C/D Aircrew Procedures, F/A-18 Loading Procedures, F-15C/D Aircrew Procedures, and F-15C/D Loading Procedures training modules. These training topics were presented to the Navy and Air Force T&E personnel prior to the first test event at each test site. AIM-9X loading training for the F/A-18 aircraft was presented to NAVWPNTSTRON at NAWCWD China Lake on 30 June 1998, while AIM-9X theory of operation and F/A-18 aircrew procedures training was presented to AIM-9X project pilots and AWL test pilots at Boeing St. Louis in conjunction with Joint Helmet Mounted Cueing System (JHMCS) training on 15 July 1998. Training Integrated Product Team (IPT) members reviewed the training materials 90 days prior to instruction, then audited the instruction. Training IPT members will review, audit, and update these training materials and future materials continually throughout the E&MD phase.

3. Operational Test Completed

a. Operational Test-II

(1) Operational Test-IIA. OT-IIA began in September 1999 with the OA Operational Test Readiness Review (OTRR) certification. This phase consists of 200 hours of captive carriage tests followed by five EDM launches and two PRM launches to assess the potential operational suitability of the AIM-9X. In April 2000 the first EDM was launched successfully against a QF-4 target to demonstrate operational capability in the defensive notch position at maximum range. In May 2000 the second EDM was launched successfully against a QF-4 target to demonstrate operational capability in a Visual Identification engagement. In May 2000 the third EDM was launched successfully against a QF-4 target to demonstrate operational capability in the defensive notch position at minimum range. In June 2000 the fourth EDM was launched against a QF-4 target to demonstrate operational capability in offensive notch position at minimum range with countermeasures. In July 2000 the fifth EDM was launched against a QF-4 target to demonstrate operational capability in a one-circle engagement with countermeasures (This was an independent OT shot).

In preparation for the start of OT-IIA, RMS provided AIM-9X F/A-18 Loading Procedures training to VX-9 ordnancemen at NAWCWD China Lake on 8 September 1999. RMS provided AIM-9X Theory of Operation and F/A-18 Aircrew Procedures training to VX-9 test pilots at Boeing St. Louis in conjunction with Boeing's JHMCS training on 14 July 1999. RMS provided an informal brief covering container inspection, missile unpacking and missile inspection to NAWCWD China Lake Station Weapons personnel (civilians) on 9 September 1999.

(2) Captive Carriage Reliability Program. CCRP began in July 2000 with the delivery of the Production Representative Model Instrumented (PRMI) missile. CCRP will continue through November 2002 to test the reliability and maintainability of the AIM-9X.

Captive carriage missions will be flown using the PRMI while its state is monitored by visual inspections and testing using the AIM-9X Built-In-Test (BIT)/Reprogrammer.

In preparation for the start of CCRP, RMS provided AIM-9X BIT/Reprogramming and Component Remove and Replace Procedures training to VX-9 ordnancemen and NAWCWD China Lake Station Weapons personnel (civilians) at NAWCWD China Lake on 12-13 July 2000. A Naval Aviation Maintenance Training Group (NAMTRAGRU) instructor from North Island and a Weapons Department Ordnanceman from Naval Air Stations (NAS) Lemoore also attended the training.

F. AIRCRAFT AND/OR EQUIPMENT/SYSTEM/SUBSYSTEM REPLACED. RMS AIM-9X design uses and modifies the existing AIM-9M rocket motor (MK36 MOD 11), warhead (WAU-17/B), and Active Optical Target Detector (AOTD) (DSU-15A/B and DSU-15B/B). The Government will supply these components to RMS during the E&MD phase to build AIM-9X configurations. Because of the AIM-9X production schedule and existing AIM-9M inventory, however, the AIM-9X will replace the AIM-9M in a phased approach.

G. DESCRIPTION OF NEW DEVELOPMENT

1. Functional Description. The AIM-9X is a supersonic, air-to-air, guided missile that employs a passive IR target acquisition system, proportional navigational guidance, a closed-loop position servo Control Actuation Section (CAS), and an AOTD. The AIM-9X is launched from an aircraft after target detection to home in on IR emissions then intercept and destroy enemy aircraft. The missile interfaces with the aircraft through the missile launcher (either the LAU-7D/A or LAU-127A/A) using a forward umbilical cable, and/or a mid-body umbilical connector and three missile hangars. The AIM-9X has three basic phases of operation: captive flight, launch, and free flight.

The AIM-9X uses/modifies the existing AIM-9M AOTD, warhead, and rocket motor, but incorporates a new Guidance Section (GS), new hangars, a new mid-body connector, new harness and harness cover, new titanium wings and fins, and a new CAS. The missile is propelled by the AIM-9M solid-propellant rocket motor, but uses a new Arm and Fire Device (AFD) handle design called the Safe Arm Selector handle. Also, the AIM-9M rocket motor is modified to mount the CAS on its aft end. Four forward-mounted, fixed titanium wings provide aerodynamic lift and stability for the missile. Four titanium control fins mounted in line with the fixed wings and activated by the CAS accomplish airframe maneuvering. The CAS provides thrust vectoring by using four jet vanes to direct the flow of the rocket motor exhaust. The AIM-9X is configured with the AIM-9M Annular Blast Fragmentation (ABF) warhead, which incorporates a new Electronic Safe and Arm Device (ESAD) to arm the warhead after launch. The AIM-9M AOTD is used to detect the presence of a target at distances out to the maximum effective range of the missile warhead and to command detonation.

a. Guidance Section. The GS provides the missile tracking, guidance, and control signals. It consists of three major subassemblies: (1) a mid-wave IR Focal Plane Array (FPA) seeker assembly for detecting the target, (2) an electronics unit that converts the detected target information to tracking and guidance command signals, and (3) a center section containing the cryoengine, contact fuze device, two thermal batteries, and required harnesses and connectors. The coolant supply for the GS is provided by the twin-opposed-piston, linear drive, Stirling cryoengine, eliminating the need for external nitrogen supply via the launchers.

b. Active Optical Target Detector. The AIM-9X AOTD is the AIM-9M DSU-15A/A or DSU-15B/B modified and redesignated as the DSU-36/B or DSU-37/B, respectively. These are the same AOTD used by AIM-9M with the exception that the forward end "V" groove is removed, because the forward marmon clamp, used to join the AIM-9M Guidance Control Section (GCS) to the AOTD, has been replaced with 14 captive screws. The AOTD is a narrow-beam, active optical, proximity fuze system. The AOTD transmits pulsed IR energy through the four forward windows and the reflected energy is received by an IR detector through the aft four windows. The purpose of the AOTD is to detect the presence of a target at distances out to the maximum effective range of the missile warhead and to generate an electrical firing signal so that the ESAD explosive train and warhead are detonated at a point where the average kill probability is maximized.

c. Warhead. The AIM-9X uses the WDU-17/B warhead; the same warhead used on the AIM-9M but uses a different safe and arm device. The new ESAD fits into the hollow central cavity of the warhead, and arms the missile at a safe distance from the launch aircraft. The warhead is an explosive-loaded, end-initiated, annular blast, titanium rod fragmentation type warhead comprised of a case assembly, a transfer tube assembly, a loaded warhead booster, a PBXN-3 explosive charge, and an enclosure. It detonates upon receipt of the explosive output from the ESAD.

(1) Electronic Safe-Arm Device. The ESAD is an in-line explosive train, electronic-actuated firing device containing environmental sensor monitoring circuitry, safety logic circuitry, high voltage circuitry and explosives. AIM-9X performance requirements for extreme flight conditions and greatly enhanced maneuverability drove the ESAD design. ESAD arming occurs only after the ESAD receives the irreversible commit to launch signal, experiences the appropriate launch environment (sensed axial acceleration) and reaches a safe separation distance. Missile battery power, which is only available once the AIM-9X is committed to an engagement, powers the ESAD.

d. Propulsion and Steering Section. The AIM-9X Propulsion and Steering Section (P/SS) design modifies the existing AIM-9M Mk 36 Mod 11 rocket motor in order to mount the CAS on the aft end of the rocket motor and to provide a mid-body umbilical connector. The AIM-9X P/SS is designated the WPU-17/B. The AIM-9X modifications to the Mk 36 Mod 11 rocket motor consist of machining off the AIM-9M wing ribs; removal of the submerged nozzle;

attachment of a mid-body umbilical; conformal CAS electronics controller module; and an interconnecting harness mounted to the underside of the rocket motor case. Two electrical contacts buttons are in the forward hanger. The aft contact button is used to complete the rocket motor igniter circuit. The forward contact button is not used. The AIM-9X rocket motor consists of a steel case; type X-61 (AS 6065) solid composite propellant grain; an igniter device; an AFD, and a Safe Arm Selector handle.

(1) Forward Hanger/Mid-body Umbilical Connector and Buffer Connector.

Slightly "taller" hangers for AIM-9X replace the hangers on the AIM-9M rocket motor. These taller hangers provide additional separation between the missile and the launcher. This separation is needed to provide adequate clearance for the AIM-9X on all launcher configurations. The middle and aft hanger mountings are unchanged from the AIM-9M configuration, while an integrated forward hanger/mid-body umbilical assembly replaces the AIM-9M forward hanger. The mid-body umbilical connector adds a mid-body interface for the LAU-127 launcher. This connection provides the missile MIL-STD-1553 digital communications with the launching aircraft, and requires a buffer connector similar to the Advanced Medium-Range Air-to-Air Missile (AMRAAM) buffer connector. The forward hanger/mid-body umbilical assembly is an integrated assembly that consists of the hanger, the mid-body umbilical connector, the umbilical cabling, and the rocket motor AFD wiring to the hanger striker points. The rocket motor AFD wiring is unchanged from that used in the AIM-9M and will interface with the striker points as in the AIM-9M configuration.

(2) Arm-Fire Device. The AFD is a manual safety device that prevents the inadvertent firing of the rocket motor. The device is switched to the arm position on the flight line by the ground crew prior to flight. It is the same MK 297 AFD that is used presently on AIM-9M, although the handle is modified to allow for the new harness cover. The new handle is called the Safe Arm Selector handle. The handle is a "PLUS" or cross design with four extensions. This design provides a visual confirmation of the arm/safe condition of the rocket motor. Three of the extensions are painted black and the fourth is painted white. The safe or armed condition is indicated by the position of the white extension in relation to the ARM/SAFE indication on the rocket motor harness cover decal.

(3) Control Actuation System. The CAS provides AIM-9X flight control and connects to the aft end of the rocket motor. The CAS is a thrust vector control system consisting of four movable aerodynamic tail fins and four jet vanes that direct the flow of the rocket motor exhaust. Each jet vane is slaved to the associated tail fin shaft on the same side of the missile. Prior to launch, spring-loaded pistons lock the tail fins and jet vanes from moving. With missile battery power available, the fin unlock command fires an unlock Electronic Explosive Device into a manifold, causing withdrawal of all fin lock tabs by the squib/cartridge output-gas-powered piston movement. A wiggle test verifies positive fin control, which must occur in order for the rocket motor initiation command to be generated. A dedicated 106 VDC thermal battery in the guidance section powers the CAS.

The jet vanes are in the exhaust section of the missile, aft of the rocket motor. They are mechanically linked through a shaft to the control fins and provide additional steering capability by redirecting the exhaust gases. Damage to the jet vanes could occur if they are used to lift the missile during ground handling.

(4) Harness and Harness Cover. Unlike the AIM-9M, an electronic harness has been added to the AIM-9X to provide the communications interface between the electronics unit in the GS and the other missile components. Due to the lack of space internally, the harness mounts externally on the underside of the missile surface. A harness cover (made up of an aft, center, and forward cover) spans most of the length of the missile and provides an aerodynamic surface and protective cover for the electronic harness and the CAS electronic circuit board. The forward and aft harness covers are made of a fibrite phenolic material and are replaceable in the field by removing the screws attaching them to the missile. The center cover is made of aluminum and specifically protects the CAS electronics module. The alignment of the center cover is critical, requiring a special fixture for proper assembly at the factory. The forward and aft covers possess various cutouts for access to the Safe and Arm Selector Handle and marmon clamps.

2. Physical Description. Approximate physical characteristics of the AIM-9X are as follows:

Length:	119 inches
Body Diameter:	5 inches
Fin Span:	17.5 inches
Weight:	188 pounds

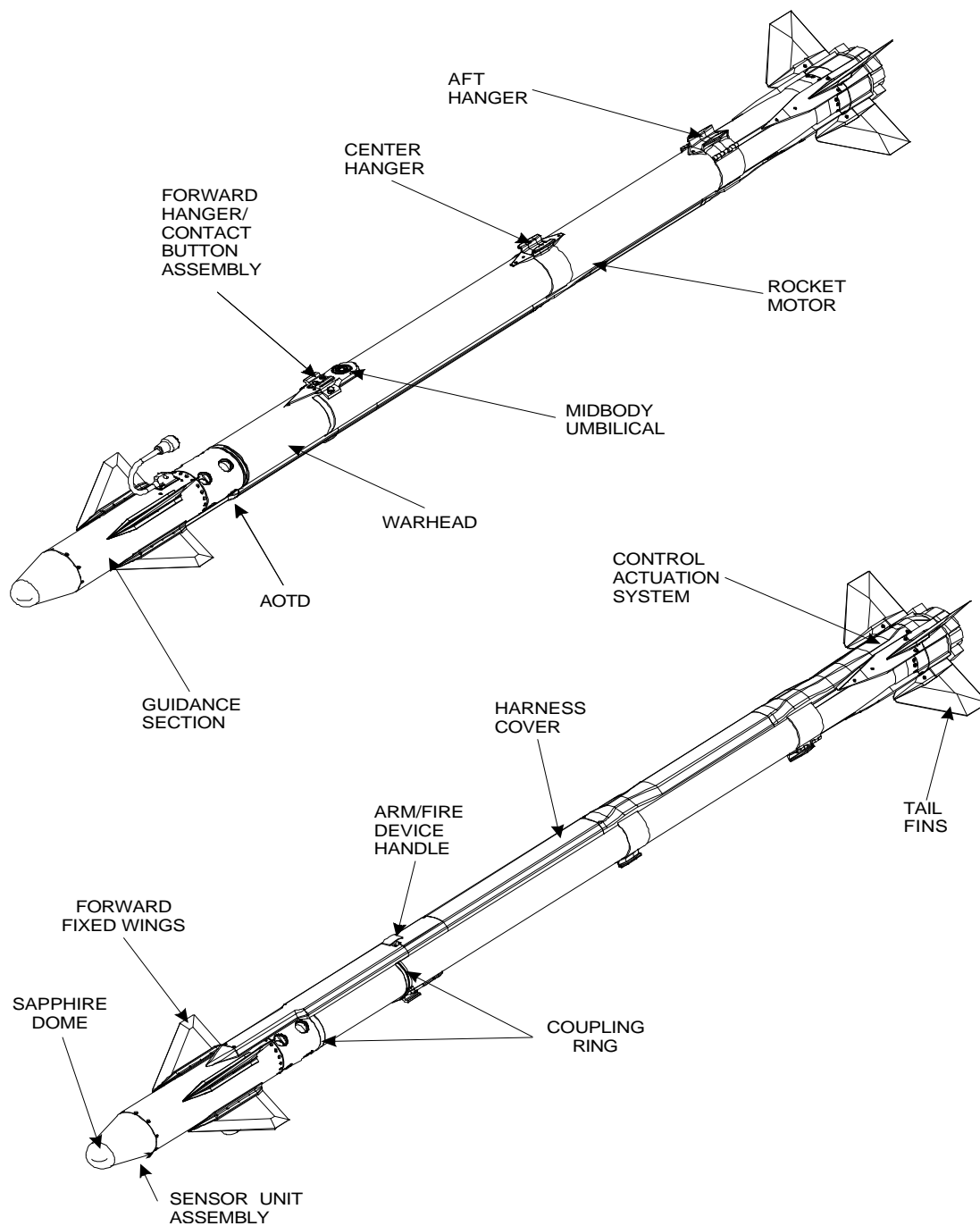


Figure I-1. AIM-9X AUR Missile.

3. New Development Introduction. Fleet introduction of the AIM-9X missile is planned to begin in FY03 via aircraft carrier load outs. Low-Rate Initial Production (LRIP) All-Up-Round (AUR) missile deliveries begin in FY02 and continue through FY05, when Full-Rate Production deliveries begin.

4. Significant Interfaces

a. Aircraft. The AIM-9X is required to be compatible, at full capability, with the F/A-18C/D/E/F, F-15C/E, F-16C/D, and F-22 aircraft. The AIM-9X will be integrated with the JHMCS, if available, which includes a helmet-mounted display with capability to cue and verify cueing of high off-boresight sensors and weapons. This missile-helmet marriage will provide the aircrew with first-look, first-shot capability in the air-to-air, within visual range, combat arena. Increased off-boresight acquisition angle and improved situational awareness will be achieved through the integrated combination of the AIM-9X missile, the JHMCS and the aircraft. JHMCS is being integrated on F/A-18E/F and F-15C aircraft.

b. Launchers. For the USN and United States Marine Corps (USMC), two guided missile launchers are available to carry and launch the AIM-9X on the F/A-18 aircraft.

(1) **LAU-7D/A.** The LAU-7A/A guided missile launcher can be used on all applicable Sidewinder weapons stations, especially the wing tip, however, it requires modification of the current power supply and the addition of digital and addressing lines to the forward umbilical to carry and launch the AIM-9X. With these modifications, it is designated the LAU-7D/A. The AN/AWM-100 and Common Racks and Launchers Test Set (CRLTS) require changes to support the LAU-7D/A. The modified AN/AWM-100 part number is 74D750051-1007. The modified AN/AWM-100 is planned to support AIM-9X Initial Operating Capability (IOC) until the upcoming AN/AWM-103 is fielded. If the AN/AWM-103 is fielded in time to support AIM-9X IOC, this NTSP will be updated accordingly.

(2) **LAU-127A/A.** The LAU-127A/A guided missile launcher can be used on the F/A-18C/D aircraft wing stations only. F/A-18C/D aircraft wing stations require a LAU-115 guided missile launcher in order to attach the LAU-127A/A.

c. AIM-9X BIT/Reprogrammer. The AIM-9X BIT/Reprogrammer interfaces with the AIM-9X and its Captive Air Training Missile (CATM), the CATM-9X. The AIM-9X BIT/Reprogrammer consists of the AN/GYQ-79 Common Munitions BIT/Reprogramming Equipment (CMBRE) and the AIM-9X Test Program Set (TPS), TTU-574/E24A. It is capable of BIT checking and reprogramming the AIM-9X and CATM-9X missiles via the forward or mid-body umbilical and also through the AUR container, the CNU-609/E.

d. CNU-609/E. The AIM-9X AUR container is designated the CNU-609/E. It can hold up to four fully assembled missiles (wings and fins attached). Missiles inside the CNU-609/E are grounded via an in-container umbilical, which can be accessed externally from the record holder

port. The container umbilical allows BIT/reprogramming of all attached missiles from a single connection. The CNU-609/E can be stacked up to ten high where sufficient space and policy permit.

5. New Features, Configurations, or Material. The AIM-9X utilizes mid-wave IR FPA seeker technology in lieu of the single-element IR seeker used in the AIM-9M. The AIM-9X is a digital missile with BIT and re-programming capability that is not present in the analog AIM-9M. A buffer connector must be used on the mid-body umbilical connector when the AIM-9X is loaded on the LAU-127 launcher. The AIM-9X uses an internal cryogenic engine, called a cryoengine, for IR element cooling. The cryoengine does not require externally supplied coolant, e.g., nitrogen, and thus does not use the nitrogen receiver assemblies contained in the LAU-7 and LAU-127 launchers. The AIM-9X uses titanium wings and fins. Also, the AIM-9X uses a CAS to direct movement of the aft fins and four internal jet vanes. The jet vanes direct the flow of the rocket motor exhaust to generate thrust vector control.

H. CONCEPTS

1. Operational Concept. Aircrew personnel will employ the AIM-9X during air-to-air combat missions against short-range threat aircraft. The AIM-9X will be integrated initially with the F/A-18C/D aircraft for USN and USMC operations, and thus, will be stowed on deployed USN aircraft carriers. Follow-on integration with other USN, USMC, and United States Air Force aircraft are possible during the AIM-9X Production, Fielding/Deployment, and Operational Support phase.

The AIM-9X seeks and homes in on IR energy emitted by the target. When an IR-emitting source enters the seeker field of view, the electronics unit generates an audio signal. The pilot hears the signal through the headset, indicating that the AIM-9X has acquired a potential target. One method of cueing the AIM-9X to the target's IR energy source is referred to as boresight, whereby the missile is physically pointed toward the target via the pilot maneuvering the aircraft. The IR energy gathered by the missile seeker is converted to electronic signals that enable the missile to acquire and track the target up to its seeker gimbal limits. A second method of cueing the AIM-9X to the target's IR energy is the Sidewinder Expanded Acquisition Mode (SEAM). SEAM slaves the AIM-9X seeker to the aircraft radar. The aircraft avionics system can slave the missile seeker up to a given number of degrees from the missile/aircraft boresight axis. The missile seeker is slaved until an audible signal indicates seeker target acquisition. Upon target acquisition, a seeker interlock in the missile is released (uncaged) and the missile seeker begins tracking the target. The AIM-9X seeker will then continue to track the target. A third method for cueing the AIM-9X to the target's IR energy is through use of the JHMCS. This method allows the pilot to cue the AIM-9X seeker to high off-boresight targets via helmet movement. The pilot can launch the AIM-9X anytime after receipt of the appropriate audible signal.

2. Maintenance Concept. The maintenance concept for the AIM-9X is based on an overall objective to assure that AUR missiles are available to fulfill commitments of operational activities, and to provide the means to restore unserviceable missiles to serviceable condition with minimum downtime. Maintenance requirements are allocated to three levels of maintenance as defined in the Naval Ordnance Maintenance Management Program (NOMMP), OPNAVINST 8000.16 (series), which replaced the Naval Airborne Weapons Maintenance Program, OPNAVINST 8600.2 (series) in September 1999. Maintenance for the AIM-9X is based on an AUR missile maintenance model, where organizational- and intermediate level maintenance activities forward failed AUR missiles and CATMs to RMS for repair.

a. Organizational level

(1) Aviation Ordnance. Work Center 230 personnel with the Aviation Ordnanceman (AO) rating perform organizational level maintenance for air-launched weapons. AOs with Navy Enlisted Classification (NEC) 8342 and 8842 and USMC Aviation Ordnance personnel with Military Occupational Specialty (MOS) 6531 perform organizational level maintenance for air-launched weapons on the F/A-18 aircraft. AIM-9X and CATM-9X organizational level maintenance consists of performing:

- Remove and install protective devices,
- Visual inspection for damage and corrosion,
- Visual inspection of missile launcher assembly interface,
- Cleaning of external surface and corrosion control,
- Aircraft weapons release and control systems checks,
- Uploading and downloading on aircraft,
- Return launcher to Aircraft Intermediate Maintenance Department (AIMD) or Marine Aviation Logistics Squadron (MALS),
- Missile BIT checks via aircraft avionics.

(2) Aviation Electronics. In most cases on the F/A-18 aircraft, Aviation Electronics Technicians (ATs) perform aircraft weapons release and control systems checks. ATs with NEC 8342 and 8842 perform weapons release and control systems checks for air-launched weapons on the F/A-18 aircraft. In some squadrons, the Integrated Weapons Team (IWT) concept is used, and in those cases AOs may perform aircraft weapons release and control systems checks. AIM-9X release and control checks for the LAU-7D/A involve the use of a modified AN/AWM-100, part number 74D750051-1007, and provide new screen displays as a result.

b. Intermediate Level

(1) Air Launched Weapons. Work Center 700 personnel with the AO rating perform intermediate level maintenance for air-launched weapons. AIM-9X and CATM-9X intermediate level maintenance will be accomplished ashore and afloat. Station Weapons personnel will perform AIM-9X and CATM-9X intermediate level maintenance tasks ashore on NAS, Marine Corps Air Stations (MCAS), and MALS. Weapons Department personnel will perform AIM-9X and CATM-9X intermediate level maintenance tasks aboard USN Aircraft Carriers (CV) and Aircraft Carrier, Nuclear (CVN). USN AOs with NEC 6801 and USMC AOs with MOS 6541 perform intermediate level maintenance for air-launched weapons. AIM-9X and CATM-9X intermediate level maintenance consists of:

- Storing and handling AUR missiles and AUR containers using support equipment,
- Unpacking and packing AUR missiles,
- Performing visual inspections of AUR missiles and AUR containers,
- Delivering missile to flight line/flight deck,
- Missile BIT checks via the AN/GYQ-79 CMBRE and AIM-9X TPS, TTU-574/E24A
- Loading (reprogramming) missile software using CMBRE and AIM-9X TPS, TTU-574/E24A
- Cleaning and corrosion control of AUR missiles,
- Preservation and painting,
- Removing and replacing specified parts of AUR missiles and AUR containers,
- Record keeping/reporting.

AIM-9X and CATM-9X missile reprogramming capability is planned ashore and aboard aircraft carriers using the AN/GYQ-79 CMBRE, but is dependent upon the approval from the Weapons Systems Explosive Safety Review Board (WSESRB). The currently-fielded AN/GYQ-79, which is used for BIT and reprogramming of Joint Direct Attack Munitions (JDAM) and Joint Stand-Off Weapon (JSOW) assets, requires the addition of a fourth box of equipment, TTU-574/E24A, to accommodate AIM-9X BIT and reprogramming. Additionally, the AIM-9X missile software is classified and requires proper handling during BIT/reprogramming operations.

(2) Strike Armament. LAU-7D/A, LAU-115A/A, and LAU-127A/A intermediate level maintenance will be accomplished ashore and afloat. Work Center 700 personnel with the AO rating perform intermediate level maintenance for strike armament equipment. AIMD personnel will perform launcher intermediate level maintenance tasks ashore on NAS, MCAS, and MALS. AIMD personnel will perform launcher intermediate level maintenance tasks aboard USN CV and CVN. USN AOs with NEC 6802 and USMC AOs with MOS 6541 perform intermediate level maintenance for launchers. Strike armament intermediate level maintenance, with respect to AIM-9X capable launchers, consists of:

- Storing, handling, and issuing launchers,
- Performing visual inspections,
- Removing and replacing replaceable assemblies,
- Testing launchers using CRALTS.

c. Depot. RMS will be responsible for depot level maintenance, both AUR and component level, for the life of the system. This maintenance will be accomplished through an AUR missile warranty and a repair contract for out-of-warranty AUR missiles and those sustaining government-induced damage. The AUR missile warranty includes AIM-9X CATMs.

d. Interim Maintenance. RMS will provide interim supply support until the Material Support Date (MSD), when organic supply support capability is established.

e. Life Cycle Maintenance Plan. RMS will be responsible for AUR and component-level life-cycle maintenance.

3. Manning Concept. The AIM-9X does not impact existing manpower requirements at Government organizational-, intermediate-, or depot-level activities. Seat factor, crew ratio, and total aircraft per squadron drive the pilot and Weapon and Sensor Operator (WSO) manpower requirements. The number of weapon pylons/stations per aircraft and total per squadron drive the load crew manpower requirements for USN and USMC fleet squadrons and Fleet Replacement Squadrons (FRS). Enlisted manning for USN and USMC intermediate maintenance activities (CV, CVN, NAS, MCAS, MALS) is based on the total assigned ordnance workload driven by supported squadron requirements, and not on specific AIM-9X requirements. Skills required to support the AIM-9X are within the capability of existing NECs and MOSs (see OPNAVINST 8000.16 Volume 2, Figures 1-2-1 and 1-3-1 for AIM-9M and AIM-120). Refer to Part II for existing USN and USMC intermediate maintenance manpower requirements.

Peacetime manpower requirements for AIM-9X organizational and intermediate level maintenance activities can be found in the Manpower Estimate Report, serial number 6T710-1/7227. Manpower requirements for AIM-9X were based on the number of CATM-9M presentations per year for a typical F/A-18 squadron (future CATM-9X presentation requirements were assumed to be consistent with present CATM-9M presentation requirements). The Navy Training and Readiness Matrix requires 1137 CATM-9M presentations per F/A-18C/D squadron per year, which is based on 17 pilots per F/A-18C/D squadron, each pilot requiring 67 CATM-9M presentations per year. A worst case of one CATM-9X presentation per sortie was used, resulting in 1137 expected unpacking, upload, captive carry, download, and packing cycles per year for squadrons outfitted with CATM-9X. A squadron was considered minimally outfitted when it had received four CATM-9X, and normally-outfitted when it had received fourteen CATM-9X. Marine Corps requirements were treated similarly.

a. Organizational level Maintenance. Loading an AIM-9X or a CATM-9X requires five AOs. One load crew (five USN AOs with NEC 8342s or five USMC AOs with MOS 6531s) can perform the 1139 CATM-9X upload-download cycles per year for an F/A-18C/D squadron. Approximately 60 percent of their yearly workload would be comprised of CATM-9X upload-download cycles. When multiple, concurrent CATM-9X uploading or downloading is required, additional load crews are required.

b. Intermediate level Maintenance. Three AOs are required to unpack, inspect, and deliver the AIM-9X or the CATM-9X to the flight line/flight deck. One team of three USN AOs with NEC 6801 per Weapons Department or three USMC AOs with MOS 6541 per MALS can perform the 1139 unpacking-packing evolutions per year to support an F/A-18C/D squadron. Approximately 90 percent of their yearly workload would be comprised of CATM-9X unpacking-packing evolutions. When multiple F/A-18C/D squadrons must be supported, additional personnel are required.

c. Depot-level Maintenance. Depot-level maintenance, both AUR and component repair, will be the responsibility of RMS. This maintenance will be supported through RMS warranty and repair contracts for out-of-warranty missiles. RMS will be responsible for establishing internal manpower levels for AIM-9X repair.

4. Training Concept. The AIM-9X training concept is divided into operator and maintenance training. Operator training is provided for F/A-18 pilot and WSO personnel. The AIM-9X training concept for maintenance is divided into organizational- and intermediate levels based on OPNAVINST 4790.2 (series) and OPNAVINST 8000.16 (series). Organizational level maintenance training is provided to AO personnel in the F/A-18 community with NECs 8342, 8842, or MOS 6531. Intermediate level training is provided to AO maintenance personnel with NECs 6801, 6802, or MOS 6541.

Selected Reserve personnel may earn intermediate level maintenance qualifications by attending formal training at Naval Air Maintenance Training Group Detachments (NAMTRAGRU DETs), providing quotas, funding, and students are available to attend the training. Specific guidelines are contained in NAVPERS 18068F Volume II, Chapter IV, Navy Enlisted Classifications.

The established training concept for most aviation maintenance training divides "A" School courses into two or more segments called Core and Strand. Many organizational level "C" School courses are also divided into separate Initial and Career training courses. "A" School Core courses include general knowledge and skills training for the particular rating, while "A" School Strand courses focus on the more specialized training requirements for that rating and a specific aircraft or equipment, based on the student's fleet activity destination. Strand training immediately follows Core training and is part of the "A" School. Upon completion of Core and Strand "A" School, graduates attend the appropriate Initial "C" School for additional specific

training. Initial "C" School training is intended for students with a paygrade of E-4 and below. Career "C" School training is provided for E-5 personnel and above to enhance skills and knowledge within their field.

a. Initial Training. RMS has provided training to NAVWPNTSTRON, VX-9, and Naval Air Systems Team (NAST) personnel prior to the start of DT-IIB, OT-IIA, and CCRP test phases, and will provide training to VX-9 prior to the start of OT-IIB. Training includes instruction and practice for aircrew, organizational level maintenance, and intermediate level maintenance. Course lengths for aircrew and organizational level maintenance courses have not exceeded one day. Course lengths for intermediate level maintenance have not exceeded two days. RMS will provide AIM-9X Explosive Ordnance Disposal (EOD) data to the Navy EOD Technology Division, Stump Neck, Maryland. This EOD data and the procedures developed and forwarded by EOD personnel at the NAWCWD range will be used to develop Render Safe Procedures (RSPs) for the AIM-9X and documented in the 60-series publications. The RSPs will be used at Navy EOD School (NAVSCOLEOD) and EOD Training and Evaluation Units (EODTEUs) to train EOD technicians.

NAST personnel, including Fleet Weapons Support Team personnel, will use/modify T&E training curricula, training aids, and LRIP Training Devices (TDs) to provide initial training. Aircrew, organizational- and intermediate level training will be provided to USN and USMC instructors within six months prior to IOC, as well as to squadron personnel and ship's company prior to carrier deployments. IOC is currently anticipated in the third quarter of FY03. USN and USMC instructors will retain the training curricula, training aids, and TDs and incorporate AIM-9X information into existing follow-on courses. NAST personnel will assist preparation of curricula packages for presentation during the appropriate Maintenance Training Readiness Review (MTRR). Currently, the locations anticipated for initial training to be conducted are:

- Naval Strike and Air Warfare Center (NSAWC), NAS Fallon, Nevada
- Strike Fighter Weapons School, Atlantic (SFWSL), NAS Oceana, Virginia
- Fighter Attack Squadron (VFA)-106, NAS Oceana, Virginia (training package only)
- Strike Fighter Weapons School, Pacific (SFWSP), NAS Lemoore, California
- VFA-125, NAS Lemoore, California (training package only)
- Marine Aviation Weapons and Tactics Squadron One (MAWTS-1), MCAS Yuma, Arizona
- Marine Fighter Attack Training Squadron (VMFAT)-101, MCAS Miramar, California (training package only)
- Maintenance Training Unit (MTU) 4030 NAMTRAGRU DET Mayport, Florida

- MTU 4032 Naval Air Maintenance Training Unit (NAMTRAU) Norfolk, Virginia
- MTU 4033 NAMTRAU North Island, California
- MTU 4034 NAMTRAGRU DET Cherry Point, North Carolina (Marine Attack Training Squadron (VMAT)-203 Fleet Replacement Enlisted Skills Training (FREST))
- MTU 4035 NAMTRAU Whidbey Island, Washington
- AO "A" School Class A1, NAS Pensacola, Florida
- Naval Airborne Weapons Maintenance Unit (NAWMU) One, Guam
- Aviation Ordnanceman Officer Career Progression (AOOCP) School, Pensacola, Florida

b. Follow-on Training. Training for existing AIM-9M missiles is in place. Operator (aircrew), organizational level, and intermediate level maintenance training courses which contain AIM-9M Sidewinder Missile information will be updated following initial training to include information pertaining to the AIM-9X. Follow-on training for the AIM-9X will be available as part of courses taught at the FRS, MTUs, NSAWC, and Strike Fighter Weapons Schools (SFWS). The addition of AIM-9X material will not change student throughput or chargeable student billets.

(1) Operator Training. Pilots and WSOs are trained at the appropriate FRS for specific aircraft operation and weapons. Pilot and WSO skills in tactics and ordnance delivery are further enhanced at SFWS, NSAWC, and through on-board proficiency training.

(a) Training Devices. TDs required for follow-on and proficiency operator training include the existing Weapon Tactics Trainer (WTT), TD number 2E7, and the CATM-9X. Also, AIM-9X assets are required for live-fire exercises, which are part of the annual Non-Combat Expenditure Allowance (NCEA).

- **Weapons Tactics Trainer, 2E7.** The WTT is a computer-based weapon system training device developed for use by F/A-18C/D aircrews, which is commonly referred to as the "dome trainer". F/A-18C/D WTTs are located at NAS Lemoore, NAS Oceana, and MCAS Miramar. They are presently concurrent with OFP 13C. The WTT provides familiarization in F/A-18C/D operational procedures and F/A-18C/D approved stores and missiles, as well as proficiency training in launch and control techniques. The F/A-18C/D WTT are not planned to be updated to OFP 15C. The F/A-18C/D WTT are planned, but not funded, to be updated to OFP 17C.

- **Tactical Operational Flight Trainer.** The F/A-18C/D Tactical Operational Flight Trainer (TOFT) uses a three-panel visual system and can be networked with other TOFT. Presently, two F/A-18C/D TOFT are located at NAS Lemoore and NAS Oceana.

They are presently concurrent with OFP 13C. The TOFT provides familiarization in F/A-18C/D operational procedures and F/A-18C/D approved stores and missiles, as well as proficiency training in launch and control techniques. The F/A-18C/D TOFT are not planned to be updated to OFP 15C. The F/A-18C/D TOFT are planned, but not funded, to be updated to OFP 17C.

- **Captive Air Training Missile, CATM-9X.** The CATM-9X is an inert, captive flight TD permitting realistic exercise of the AIM-9X guidance section. It consists of a tactical AIM-9X guidance section, tactical wings and fins, and an inert, two-piece aft section. The tactical guidance section is modified by replacing its two lithium ion batteries with ballast and by setting a firmware flag to “captive”. This modification eliminates the need for a special training umbilical, while still allowing software reprogramming. Airborne operation of the CATM-9X provides the aircrew with all AIM-9X interactions between the aircraft and missile without expending the missile. Fourteen CATM-9X are planned per F/A-18 squadron. For detailed information on CATM-9X refer to element IV.A.2.

(b) Training Aids. The AIM-9X Interactive Courseware (ICW) will be a component of the Strike Fighter Weapons and Tactics (SFWT) curricula, and will be hosted on the Strike Fighter Training System (SFTS). SFWT and SFTS are two of three components of NSAWC’s Strike Fighter Training Program (SFTP), which is primarily targeted at providing post-FRS training to Strike Fighter aircrew. The SFTS will be a high-speed, wide area network, linking schools and squadrons together with standardized, Computer-Based Training (CBT) and ICW. Strike Fighter Tactics Instructors (SFTIs), the third component of the SFTP, are trained by NSAWC N7 (Topgun) and administer the SFWT curricula within the squadrons. AIM-9X ICW will be developed for the SFTS by NSAWC, PMA205 PMA259, along with Air Force participation for F-15C content. It is anticipated for release in FY03 prior to IOC. For detailed information on AIM-9X ICW refer to element IV.B.2.

(c) Courses. The following table lists the applicable operator training courses. The AIM-9X source material will be incorporated in these courses with minimal impact. The addition of AIM-9X material will not change student throughput or chargeable student billets, and, therefore, these courses will not appear in Parts II and III. See F/A-18C/D NTSP for course details.

Table I-2. Operator Courses

COURSE NUMBER	COURSE TITLE	AIM-9X RFT DATE
D/E-2A-0601	F/A-18 Fleet Replacement Pilot Category 1	FY03
D/E-2A-0602	F/A-18 Fleet Replacement Pilot Category 2A	FY03
D/E-2A-0604	F/A-18 Fleet Replacement Pilot Category 3A	FY03
D/E-2A-0606	F/A-18 Fleet Replacement Pilot Category 4	FY03

COURSE NUMBER	COURSE TITLE	AIM-9X RFT DATE
None	F/A-18 Strike Fighter Advanced Readiness Program	FY03
None	F/A-18 Strike Fighter Weapons Employment	FY03
M13P4B3	F/A-18D Fleet Replacement Pilot Basic and Transition	FY03
M13P3V3	F/A-18D Fleet Replacement Pilot Refresher	FY03
M13P3W3	F/A-18D Fleet Replacement Pilot Modified Refresher	FY03
M13P4C3	F/A-18D WSO Basic and Transition	FY03
M13P3R3	F/A-18D WSO Refresher	FY03
M13P3S3	F/A-18D WSO Modified Refresher	FY03
N/A	Topgun AIM-9X Brief	FY03

(2) **Initial Skills - Maintenance.** The AO “A1” School at NAS Pensacola, Florida will provide AIM-9X initial skills training for the AO rating. The Dummy Air Training Missile (DATM), DATM-9X, is the TD required for AIM-9X initial skills maintenance training. See Figures I-2 through I-7.

(a) **Training Devices.** TD required include:

- **DATM-9X.** The DATM-9X is physically representative of the AIM-9X. It is a TD that facilitates instruction and familiarization for transporting, handling, loading, and visual inspection procedures for organizational- and intermediate level maintenance training purposes. The DATM-9X is not certified for flight, and is designed for ground training use only. For the navy and Marine Corps, the DATM will only be used in the schoolhouse environment and will be repaired locally. Remove and replace components that are shared with the tactical AIM-9X, e.g., wings, fins, etc., will be available in the supply system. For detailed information on DATM-9X, refer to element IV.A.2.

- **Aviation Ordnance Trainer (Device 3B64).** The Aviation Ordnance Trainer is a mock-up of a generic aircraft fuselage/wing used for ordnance load training. Its designed was originally based upon the A-4, A-6, A-7 aircraft. AIM-9X does not drive a change to this TD. Issues regarding update of this TD should be addressed at the next AO “A” School Maintenance Training Readiness Review (MTRR).

(b) **Technical Training Equipment.** TTE required include:

- **LAU-7D/A Launcher.** The LAU-7D/A is required to teach and practice AIM-9X release and control checks, AIM-9X loading, and launcher maintenance. Existing Schoolhouse LAU-7A/A assets will require modification to the LAU-7D/A configuration.

- **AN/AWM-100 (part number 74D750051-1007).** The AN/AWM-100 requires modification to work with the LAU-7D/A. Existing Schoolhouse AN/AWM-100 assets will require modification to the 74D750051-1007 configuration. The modified AN/AWM-100 is planned to support AIM-9X IOC until the upcoming AN/AWM-103 is fielded. If the AN/AWM-103 is fielded in time to support AIM-9X IOC, this NTSP will be updated accordingly.

- **CNU-609/E AUR Container.** The AIM-9X AUR container is required to teach and practice unpacking/packing evolutions, as well as, container maintenance.

(c) **Courses.** AIM-9X source material will be incorporated into the following courses with minimal impact. The addition of AIM-9X material will not change student throughput or chargeable student billets, and, therefore, these courses will not appear in Parts II and III. The following table lists the applicable initial skills courses for the AO rating that will require AIM-9X data.

Table I-3. Initial Skills - Maintenance Courses

COURSE NUMBER	COURSE TITLE	AIM-9X RFT DATE
C-646-2011A	Aviation Ordnanceman Common Core Class A1	FY03
C-646-2012	Aviation Ordnanceman Navy Difference Training Class A1	FY03

(3) **Organizational level Maintenance.** Organizational level Maintenance personnel are trained at the appropriate SFWSL and SFWSP for F/A-18C/D weapons loading and launcher release and control checks. Weapon loading skills are further enhanced through on-board proficiency training. See Figures I-2 through I-4.

(a) **Training Devices.** The TD required for follow-on and proficiency training is the CATM-9X. The CATM-9X will be used at SFWS for the AIM-9X Conventional Weapons Technical Proficiency Inspection (CWTPI), as well as at operational F/A-18C/D squadrons to satisfy loading and handling training requirements.

(b) **Technical Training Equipment.** TTE required include:

- **LAU-7D/A Launcher.** The LAU-7D/A is required to teach and practice AIM-9X release and control checks and AIM-9X loading. Existing Schoolhouse LAU-7A/A assets will require modification to the LAU-7D/A configuration.

- **AN/AWM-100 (part number 74D750051-1007).** The AN/AWM-100 requires modification to work with the LAU-7D/A. The existing Schoolhouse AN/AWM-100 assets will require modification to the 74D750051-1007 configuration. The modified AN/AWM-100 is planned to support AIM-9X IOC until the upcoming AN/AWM-103 is fielded.

If the AN/AWM-103 is fielded in time to support AIM-9X IOC, this NTSP will be updated accordingly.

(c) **Courses.** AIM-9X will be taught in the following organizational level maintenance training courses. The AIM-9X source material will be incorporated in these courses with minimal impact. The addition of AIM-9X material will not change student throughput or chargeable student billets, and, therefore, these courses will not appear in Parts II and III. See the F/A-18C/D NTSP for organizational level maintenance training course details.

Table I-4. Organizational level Maintenance Courses

COURSE NUMBER	COURSE PROVIDER	COURSE TITLE	AIM-9X RFT DATE
D/E-646-0640	SFWSL/SFWSP	F/A-18 Conventional Weapons Loading	FY03
D/E-646-0647	SFWSL/SFWSP	F/A-18 Conventional Release System Test	FY03
C-102-9963	NAMTRAGRU	F/A-18 Avionics Systems (Career) Organizational Maintenance	FY03
C-102-9964	NAMTRAGRU	F/A-18 Avionics Systems (Initial) Organizational Maintenance	FY03
C-646-9973	NAMTRAGRU	F/A-18 Stores Management System (Initial) Organizational Maintenance	FY03
C-646-9974	NAMTRAGRU	F/A-18 Stores Management System (Career) Organizational Maintenance	FY03

(4) **Intermediate level Maintenance.** Intermediate level maintenance training is available for USN and USMC AOs through the appropriate MTU. See Figures I-5 through I-7.

(a) **Training Devices.** The TD required for follow-on and proficiency training is the DATM-9X. The DATM-9X is physically representative of the AIM-9X. It is a TD that facilitates instruction and familiarization for transporting, handling, loading, and visual inspection procedures for organizational- and intermediate level maintenance training purposes. The DATM-9X is not certified for flight, and is designed for ground training use only. For the Navy and Marine Corps, the DATM will only be used in the schoolhouse environment and will be repaired locally. Remove and replace components that are shared with the tactical AIM-9X, e.g., wings, fins, etc., will be available in the supply system. For detailed information on DATM-9X, refer to element IV.A.2.

(b) **Technical Training Equipment.** TTE required include:

- **CNU-609/E AUR Container.** The AIM-9X AUR container is required to teach and practice unpacking/packing evolutions, as well as, container maintenance.
- **AN/GYQ-79 CMBRE and TTU-574/E24A AIM-9X TPS.** CMBRE and the AIM-9X TPS are needed to teach and practice AIM-9X BIT/reprogramming operations. Additionally, a software program that simulates the AIM-9X Munitions Application Program (MAP) is being developed by RMS for training use. The AIM-9X MAP is the software that resides on a PC card that is used by CMBRE to BIT/reprogram tactical AIM-9X assets and is therefore classified. The AIM-9X “Training” MAP will be unclassified, will also reside on a PC card and it will be used with CMBRE and the DATM-9X to teach and practice AIM-9X BIT/reprogramming procedures.
- **315-ASX AC Power Source.** AIM-9X BIT/reprogramming requires a conditioned AC power source for CMBRE and AIM-9X TPS operation. On board aircraft carriers, the power conditioning units are being installed via a SHIPALT at the forward and aft transfer areas and a third area that is To Be Determined (TBD). For the schoolhouse, a commercial off-the-shelf Alternate Current power source, commonly referred to as the power cart, is utilized. The JDAM program office, PMA201, has procured and delivered the power carts for the schoolhouses. They are model number 315-ASX and are made by Pacific™.
- **LAU-7D/A Launcher.** The LAU-7D/A is required to teach and practice LAU-7D/A intermediate maintenance. Existing Schoolhouse LAU-7A/A assets will require modification to the LAU-7D/A configuration.
- **CRALTS.** A properly configured CRALTS is required to teach and practice LAU-7D/A intermediate maintenance. Existing Schoolhouse CRALTS assets will require modification (software and cables) to the appropriate configuration.

(c) **Courses.** The following table lists intermediate level maintenance training courses that will have AIM-9X source material incorporated with minimal impact. These updates will not cause changes in student throughput or chargeable student billets; therefore, these courses will not appear in Parts II, III and IV.

Table I-5. Intermediate level Maintenance Courses with Minimal AIM-9X Impact

COURSE NUMBER	COURSE TITLE	AIM-9X RFT DATE
C-646-4108	Air Launched Weapons Ordnance Supervisor	FY03
C-646-4109	Weapons Department General Aviation Ordnance	FY03

The following intermediate level maintenance training courses will have AIM-9X source material incorporated with more than minimal impact. Course updates will be based on incorporating the RMS training materials used for DT and OT training, but will edit and reformat the material to fit within the existing course length and format. The addition of the AIM-9X training materials will not change existing student throughput or chargeable student billets. For detailed information, refer to element IV.A.2.

Title.....	Strike Armament Systems Intermediate Maintenance
CIN.....	C-646-3118 (part of D/E-646-7001)
Model Manager	MTU 4033, NAMTRAU NAS North Island
Description.....	This course provides training to Aviation Ordnance Technicians, including: <ul style="list-style-type: none"> • Operational checkout procedures • Corrosion control • Troubleshooting procedures • Periodic maintenance procedures • Component removal, repair, replacement procedures • Use of special tools and test equipment • Use of publications • Use of safety and administrative procedures applicable to aircraft armament equipment items Upon completion of this course, the student will be able to perform work on aircraft armament equipment in the Aircraft Intermediate Maintenance Department environment under limited supervision.
Locations	MTU 4032, NAMTRAU, NAS Norfolk MTU 4033, NAMTRAU, NAS North Island
Length.....	65 days
RFT date.....	Currently available FY03 Estimated for LAU-7D/A impacts
Skill identifier...	AO 6802
TD	N/A
Prerequisite	Graduate of AO "A" School or designated AO striker
 Title.....	 Air Launched Guided Missiles Intermediate Maintenance
CIN.....	C-122-3111A (part of D/E-646-7007)
Model Manager	MTU 4030, NAMTRAGRU DET Naval Station (NS) Mayport

Description.....	<p>This course provides training to the first tour Aviation Ordnancemen, Gunner's Mates and Torpedoman's Mates, including:</p> <ul style="list-style-type: none"> • Basic theory • Safety precautions • Technical publications • Missile reporting procedures <p>Upon completion, the student will have sufficient knowledge/theory of the Sparrow, Phoenix, Sidewinder, Sidearm, AMRAAM, Maverick, Harpoon, SLAM, HARM, Tow, Hellfire, Penguin All Up Round (AUR) Air Launched Guided Missiles, Walleye Weapon System, Tactical Air Launched Decoy (TALD) and Air Nitrogen Purifier Units to perform, under close supervision, intermediate maintenance in the CV/CVN, LPH/LHA, NAS/MCAS working environment.</p>
Locations	<p>MTU 4030, NAMTRAGRU DET, NS Mayport MTU 4032, NAMTRAU, NAS Norfolk MTU 4033, NAMTRAU, NAS North Island MTU 4035, NAMTRAU, NAS Whidbey Island</p>
Length.....	11 days
RFT date	Currently available FY03 Estimated for AIM-9X impacts
Skill identifier...	AO 6801
TD	DATM-9X
Prerequisite	AO, GMG, TM, or Graduate of AO (ClassA1) School or equivalent or designated striker
Title.....	Aviation Ordnance Intermediate Maintenance Technician
CIN.....	C-646-3105 (part of M-646-7026)
Model Manager	MTU 4034 (VMAT-203 FREST) MCAS Cherry Point, North Carolina
Description.....	<p>This course provides training to USMC ordnance personnel, including:</p> <ul style="list-style-type: none"> • Basic theory • Safety precautions • Technical publications • Missile/launcher reporting procedures <p>Upon completion, the student will have sufficient knowledge/theory to be able to work on ordnance/armament in the MALS environment.</p>
Locations	<p>MTU-4034 (VMAT-203 FREST) MCAS Cherry Point, North Carolina</p>
Length.....	75 days
RFT date	Currently available FY03 Estimated for AIM-9X impacts
Skill identifier...	MOS 6541

TD DATM-9X
Prerequisite C-646-2011A Aviation Ordnanceman Common Core Class A1

(5) Explosive Ordnance Disposal Training. EOD training is conducted at the NAVSCOLEOD at Eglin Air Force Base, Florida. EODTEU One at San Diego, California and EODTEU Two at Fort Story, Virginia provide additional advanced and specialized EOD training.

(a) Training Devices. TDs required for EOD training are the Practical Explosive Ordnance Disposal System Trainer (PEST) and the Classroom Explosive System Trainer (CEST).

- **Practical Explosive Ordnance Disposal System Trainer.** The AIM-9X PEST is a full-scale model of the AIM-9X, containing inert versions of all explosive train components. The AIM-9X PEST possesses the same weight and center of gravity characteristics as the tactical missile. The AIM-9X PEST is used to teach and practice the AIM-9X RSP. It is used in the identification line, the outdoor practice area, and the outdoor test area. For further details on TDs see element IV.A.2.

- **Classroom Explosive Ordnance Disposal System Trainer.** The AIM-9X CEST is an inert, cut-away model of the AIM-9X, displaying locations and types of explosive and hazardous materials, initiators, igniters, and fuze. It is used during classroom instruction to facilitate familiarization of the AIM-9X missile and its associated RSPs. For further details on TDs see element IV.A.2.

(b) Courses. AIM-9X will be taught in the following EOD training courses. The AIM-9X RSPs will be incorporated in these courses with minimal impact. The AIM-9X training material will not change student throughput or chargeable student billets, and, therefore, these courses will not appear in Parts II and III.

Table I-6. EOD Courses

COURSE NUMBER	COURSE TITLE	AIM-9X RFT DATE
A-431-0011	Explosive Ordnance Disposal (EOD) Phase II (Navy)	FY03
A-431-0012	Explosive Ordnance Disposal (EOD) Phase II	FY03
G-431-0001	EOD Pre-deployment Team Training	FY03

c. Student Profiles. The following table lists the enlisted manpower and personnel classifications required to support AIM-9X. In many instances, AO personnel who will support AIM-9X will not possess the component NEC because they attained their primary NEC prior to the recent A School and C School changes.

Table I-7. AIM-9X Student Profiles.

RATING and NEC or MOS	TITLE	TRAINING TRACK REF.
AO 8842	F/A-18 Armament System Organizational Apprentice Maintenance Technician	Figure I-2
AO 8342	F/A-18 System Organizational Maintenance Technician	Figure I-2
AT 8842	F/A-18 Armament System Organizational Apprentice Maintenance Technician	Figure I-3
AT 8342	F/A-18 System Organizational Maintenance Technician	Figure I-3
6531	Aircraft Ordnance Technician (F/A-18)	Figure I-4
6541	Aviation Ordnance Intermediate Maintenance Technician	Figure I-5
AO 6801	Air Launched Weapons Technician	Figure I-6
AO 6802	Strike Intermediate Armament Maintenceman	Figure I-7

d. Training Pipelines. New training tracks will not be required for AIM-9X. The training pipelines and tracks shown in Figures I-2 through I-7 correspond to the student profiles listed above. These pipelines and tracks are based on the training system that is in place today, and may not reflect actual progressions for personnel who completed formal training prior to the recent A School and C School changes. Shaded courses are affected by introduction of the AIM-9X. Introduction of the AIM-9X will not affect any organizational- or intermediate level maintenance functions. Training tracks and associated courses are available in the Office of the Chief of Naval Operations (OPNAV) Aviation Training Management System (OATMS). The following training tracks apply and are listed in OATMS.

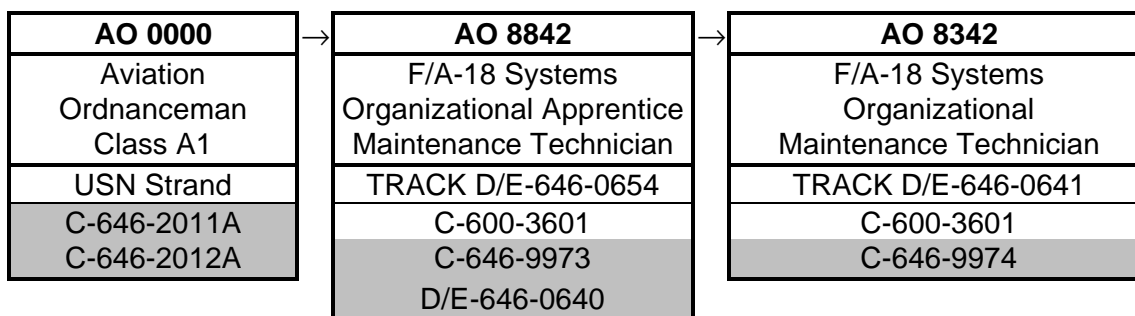


Figure I-2 F/A-18 Aviation Ordnanceman Systems Organizational Maintenance Career Progression

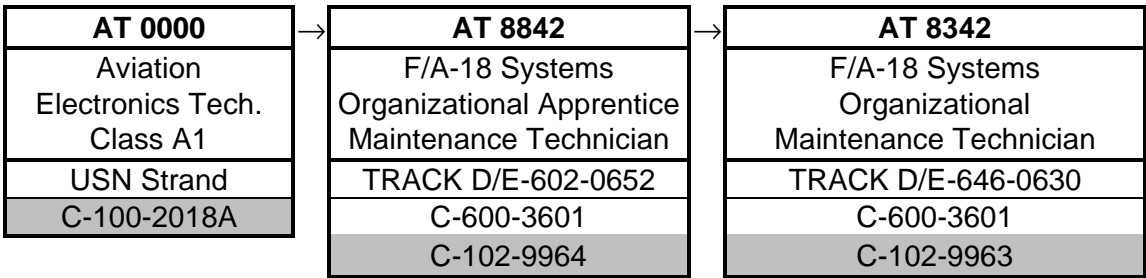


Figure I-3 F/A-18 Aviation Electronics Technician Systems Organizational Maintenance Career Progression

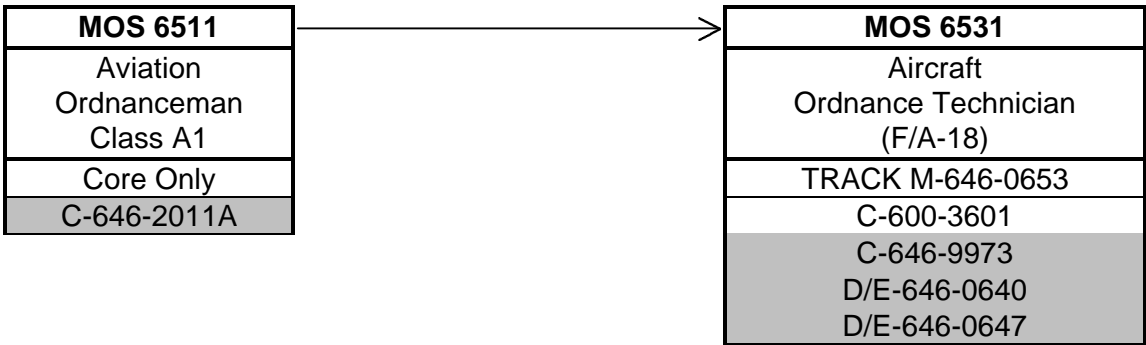


Figure I-4 F/A-18 Aircraft Ordnance Technician Career Progression

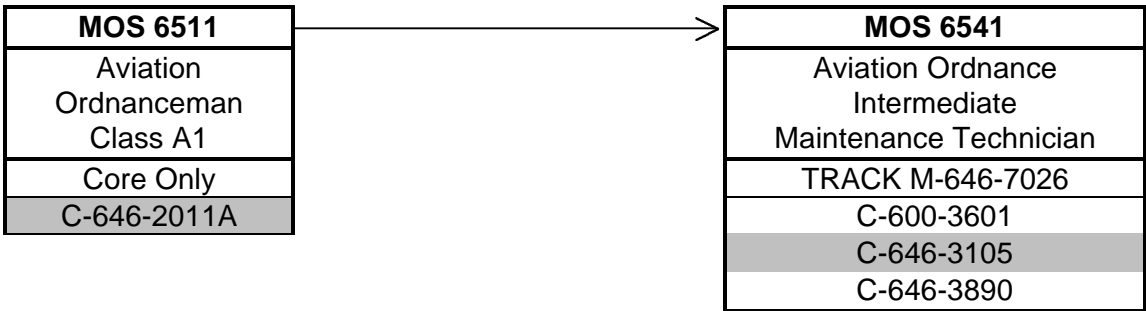


Figure I-5 Aviation Ordnance Intermediate Maintenance Technician Career Progression

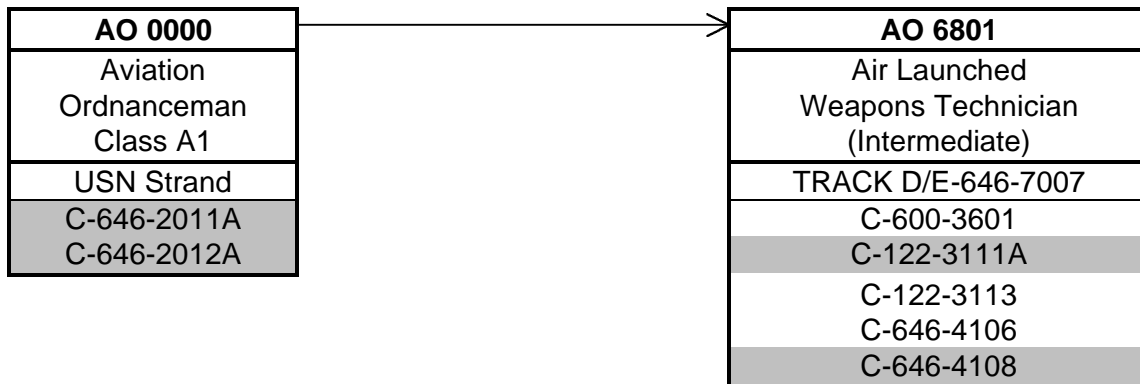


Figure I-6 Air Launched Weapons Technician Career Progression



Figure I-7 Strike Intermediate Armament Maintenanceman Career Progression

I. ON-BOARD (IN-SERVICE) TRAINING

1. Proficiency or Other Training Organic to the New Development

a. Maintenance Training Improvement Program. The Maintenance Training Improvement Program (MTIP) is used to establish an effective and efficient training system responsive to fleet training requirements. MTIP is a training management tool that, through diagnostic testing, identifies individual training deficiencies at the organizational and intermediate levels of maintenance. MTIP is the comprehensive testing of one's knowledge. It consists of a bank of test questions managed through automated data processing. The Deputy Chief of Staff for Training assisted in development of MTIP by providing those question banks (software) already developed by the Navy. MTIP was implemented per OPNAVINST 4790.2 series. MTIP allows increased effectiveness in the application of training resources through identification of skills and knowledge deficiencies at the activity, work center, or individual technician level. Refresher training is concentrated where needed to improve identified skill and knowledge shortfalls. MTIP will be replaced by the Aviation Maintenance Training Continuum System (AMTCS). AMTCS completed Beta version review/test of the E-2/C-2 and F-14 curricula. AMTCS has begun Beta version review/test of F/A-18 curricula and is expected to complete Beta version testing in October 2000.

COMNAVAIRPAC has discontinued using MTIP. They are currently using maintenance data products as a source to determine maintenance training deficiencies until AMTCS is implemented.

Question banks for AIM-9X will be developed from training material incorporated into the organizational and intermediate level follow-on training courses. Suggested questions will be provided with the initial training material packages, however, NAMTRAGRU and SFWS will ultimately control the final question bank content.

b. Aviation Maintenance Training Continuum System. AMTCS will provide career path training to the Sailor or Marine from their initial service entry to the end of their military career. AMTCS is planned to be an integrated system that will satisfy the training and administrative requirements of both the individual and the organization. The benefits will be manifested in the increased effectiveness of the technicians and the increased efficiencies of the management of the training business process. By capitalizing on technological advances and integrating systems and processes where appropriate, the right amount of training can be provided at the right time, thus meeting the Chief of Naval Operation's (CNO)'s mandated "just-in-time" training approach.

Technology investments enable the development of several state-of-the-art training and administrative tools: CBT for the technicians in the Fleet in the form of ICW with Computer Managed Instruction (CMI) and Computer Aided Instruction (CAI) for the schoolhouse.

Included in the AMTCS development effort is the Aviation Maintenance Training Continuum System - Software Module (ASM) which provides testing [Test and Evaluation (TEV)], recording [Electronic Training Jacket (ETJ)], and a Feedback system. The core functionality of these AMTCS tools are based and designed around the actual maintenance-related tasks the technicians perform, and the tasks are stored and maintained in a Master Task List (MTL) data bank. These tools are procured and fielded with appropriate COTS hardware and software, i.e., Fleet Training Devices (FTD) - Laptops, PCs, Electronic Classrooms (ECR), Learning Resource Centers (LRC), operating software, and network software and hardware.

Upon receipt of direction from OPNAV (N889H), AMTCS is to be implemented and the new tools integrated into the daily training environment of all participating aviation activities and supporting elements. AMTCS will serve as the standard training system for aviation maintenance training within the Navy and Marine Corps, and is planned to supersede the existing MTIP and Maintenance Training Management and Evaluation Program (MATMEP) programs.

The Ammunition and Explosive Handling Qualification and Certification (QUAL/CERT) Program requires periodic, local QUAL/CERT events to be documented in a QUAL/CERT Record. These QUAL/CERT Records will be maintained physically at the local activity, but will be entered electronically into the ETJ for tracking purposes.

c. Strike Fighter Training Program. NSAWC, which includes Topgun (N7),

SFWSL, SFWSP, and the Strike Weapons and Tactics School Atlantic (SWATSLANT), is developing post-FRS training at the squadron level for Navy Strike Fighter aircraft (F-14 and F/A-18). This post-FRS training continuum is known as the SFTP, and is composed of three equally critical elements: The SFWT curricula, the SFTI, and the SFTS. The SFWT curricula will be taught by each squadron's SFTI, who will be supported by the SFTS, a multimedia computer-based training system that will host CMI, CAI, CBT and ICW. Aircrew weapons proficiency training will continue to be accomplished using existing methods: Academic, Simulator (WTT/Weapon Systems Trainer (WST)), CATM and/or embedded aircraft simulation, and NCEA; but capability ratings will be performance-based rather than completion-based, i.e., it will not be based simply upon completing the training events, but upon how well they are completed. Training events will be measured using defined metrics, and collectively these events will be evaluated to determine actual combat readiness, quantitatively (objectively) rather than qualitatively (subjectively).

2. Personnel Qualification Standards. Not Applicable (NA)

3. Other On-Board or In-service Training Packages

a. Marine Aviation Training Management Evaluation Program. Marine Corps on-board training is based on the current series of Marine Corps Order (MCO) P4790.12, Individual Training Standards System and MATMEP. This program is designed to meet Marine Corps, as well as Navy OPNAVINST 4790.2 (series), maintenance training requirements. It is a performance-based, standardized, level-progressive training management and evaluation program. It identifies and prioritizes task inventories by MOS through a front-end analysis process that identifies task, skill, and knowledge requirements of each MOS. MTIP questions coupled to MATMEP tasks will help identify training deficiencies that can be addressed with remedial training. (AMTCS is planned to replace MATMEP.)

b. Conventional Weapon Technical Proficiency Inspection. The CWTPI is a graded inspection administered by Strike Fighter Wing (STRKFTRWING). It is governed by the policy and procedures established by each Type Commander (TYCOM). The inspection team is made up of SFWS instructors under the direction of the Wing Ordnance Officer. The CWTPI covers all areas of conventional weapon load and release, and control systems checks. The inspection evaluates the squadron's ability to wire-check, upload and download conventional ordnance correctly, use applicable publications, and place ordnance on its designated target. The squadron inspection is conducted annually, six months prior to deployment, or at the request of the squadron's Commanding Officer. All personnel, including squadron pilots, directly involved in the inspection, require a written examination. A 72-hour time limit is granted for the completion of the entire evolution. The final grade is an average score derived from the written exams, ordnance loads, wire checks, and the pilot's proficiency to deliver weapons on target. Pre-inspection training is provided by the appropriate SFWS followed by the CWTPI. The CWTPI

determines the need for further conventional weapons load training of squadron AO and AT personnel at the appropriate SFWS.

c. Marine Corps Combat Readiness Evaluation. Marine Corps Headquarters schedules the USMC fighter and attack wings for a yearly Combat Readiness Evaluation. This is part of the Marine Corps Combat Readiness Evaluation System. An entire Marine Corps activity is moved to another location to participate in war exercises and to be evaluated. Training is an on-going Marine Corps evolution that culminates with the Combat Readiness Evaluation. The evaluation determines the need for further conventional weapons load training of squadron personnel.

d. Explosive Handling Qualification and Certification Program. The Ammunition and Explosive Handling Qualification and Certification (QUAL/CERT) Program is implemented by OPNAVINST 8020.14 and MCO P8020.11. To minimize the probability of mishap, the potential for personnel errors are controlled through training (qualification) coupled with a management process designed to prevent inadequately trained personnel from performing ammunition and explosives jobs/tasks (certification). Aviation Ordnancemen are required to perform periodic, local QUAL/CERT events in order to be authorized to handle ordnance. Results of these QUAL/CERT events are documented in a hardcopy QUAL/CERT Record and kept on file by the local activity.

J. LOGISTICS SUPPORT

1. Manufacturer and Contract Numbers. In December 1994, two contractors, Raytheon Missile Systems Division and HMSC, were awarded DEM/VAL contracts. Both contracts were completed by July 1996. The E&MD contract, N00019-97-C-0027, was awarded to HMSC in January 1997. HMSC later became RMS.

2. Program Documentation. The AIM-9X Sidewinder Single Acquisition Management Plan (SAMP) was prepared by PMA259 prior to the Milestone II decision and approved 3 December 1996 in an effort to streamline program documentation. It contains all essential program information. The AIM-9X SAMP was updated for the LRIP milestone decision and approved in August 2000. The AIM-9X Sidewinder Acquisition Logistics Support Plan (ALSP), document number MS-371, was prepared by AIR-3.1.1L and was approved 25 January 1999. The ALSP was updated for the LRIP milestone decision and approved in August 2000.

3. Technical Data Plan. Technical data associated with the AIM-9X Missile Program is in compliance with the Continuous Acquisition Life-cycle Support strategy. Most AIM-9X program data is available in digital format. RMS has setup their version of a Contractor Integrated Technical Information Service (CITIS), which is called the Program Document Management (PDM) system. PDM provides authorized AIM-9X personnel access to all unclassified contract data requirements, which includes training curricula and technical manuals.

4. Test Sets, Tools, and Test Equipment

a. Organizational level Maintenance

(1) **Tools.** The AIM-9X is delivered to the flight line/deck as an AUR with its wings and fins installed. It does not require any new or peculiar tools for organizational level maintenance. Common tools, such as speed wrenches, are required to complete missile/launcher loading and to install the buffer connector when applicable.

(2) **Test Sets and Test Equipment.** The AIM-9X requires release and control checks for its launchers and a post-loading BIT check via the cockpit controls and displays. Other tests for the AIM-9M, such as the AIM-9M Missile-On-Aircraft-Test (MOAT) using the TTU-304/E, are not be required because of the AIM-9X's digital characteristics.

(a) **AN/AWM-100.** The LAU-7D/A launcher requires a release and control check once it is installed on the F/A-18C/D aircraft. Organizational level maintenance activities will use the modified AN/AWM-100, part number 74D750051-1007, to test LAU-7D/A and aircraft circuits prior to loading the AIM-9X missile. The AN/AWM-100, part number 74D750051-1003, is the current configuration of the AN/AWM-100, which will require modification to the 74D750051-1007 configuration. The necessary modification will be implemented as part of a larger Engineering Change Proposal (ECP) for the F/A-18C/D Digital Wingtip Modification. The modified AN/AWM-100 is planned to support AIM-9X IOC until the upcoming AN/AWM-103 is fielded. If the AN/AWM-103 is fielded in time to support AIM-9X IOC, this NTSP will be updated accordingly.

b. Intermediate level Maintenance

(1) **Tools.** The AIM-9X is delivered to the magazine in its AUR container, CNU-609/E, with its wings and fins installed. The AUR container can hold up to four AIM-9X missiles. The AIM-9X does not require any new or peculiar tools for intermediate level maintenance. Common tools, such as torque wrenches, are required to remove/replace field-replaceable components when applicable.

(2) Test Sets and Test Equipment

(a) **AN/GYQ-79 CMBRE and TTU-574/E24A AIM-9X TPS.** The AIM-9X requires the AN/GYQ-79 CMBRE together with the AIM-9X TPS to perform in-container and out-of-container BIT and missile software reprogramming. The AIM-9X TPS is commonly referred to as "Box 4" because it adds a fourth box to the three boxes that contain the components of the baseline CMBRE. The AIM-9X TPS contains two PC cards, a switch box and cables, including a cable for connecting the CMBRE to the CNU-609/E in-container cable, another for connecting CMBRE to either the forward or mid-body umbilical on the missile, and two self-test cables. Using the CNU-609/E in-container cable connection allows up to four

missiles to be connected simultaneously to CMBRE for BIT and reprogramming, although only one missile can be tested/reprogrammed at a time. The two PC cards are placed in the Digital Computer Set during BIT and reprogramming procedures. One PC card contains the missile software and the program to load it into the missile. It is classified secret and thus makes the BIT and reprogramming procedures classified. The other PC card can store missile BIT data if the user chooses to download it from missile memory. The AIM-9X CMBRE TPS will be procured from RMS via the LRIP contract options.

(b) **CRALTS.** Intermediate level maintenance for the launchers will be performed with the existing CRALTS, which requires modification to include LAU-7D/A test capability. CRALTS is used to test the LAU-7A/A launcher and will require modification to test the LAU-7D/A launcher. The necessary modification will be implemented as part of a larger ECP for the F/A-18C/D Digital Wingtip Modification.

c. **Depot-level Maintenance.** RMS will be responsible for depot-level maintenance and associated tools, test sets, and equipment.

5. Repair Parts. Repair parts for the CATM-9X and DATM-9X (as well as the AIM-9X and CNU-609/E) will be addressed during the AIM-9X provisioning process. Provisioning of consumable repair parts will be procured through the Naval Inventory Control Point. The MSD is projected to be FY03. Prior to MSD, RMS will provide all consumable repair parts. Parts under consideration for the training missile configurations include wings, fins, buffer connectors, forward and aft harness covers, forward umbilical, and the Safe Arm Selector handle.

6. Human Systems Integration. The original Human Systems Integration Plan (HSIP) for the AIM-9X was approved in July 1994, and revised throughout DEM/VAL. Following DEM/VAL, but prior to the Milestone II decision, the HSIP was incorporated into the SAMP, which was approved 3 December 1996, then later revised and approved 3 March 1997, and again August 2000. The only unique human systems integration challenge facing the AIM-9X is integration with the JHMCS. The JHMCS will require more pilot interaction in the search and acquisition of targets. However, this additional task is well within the current Navy, Marine Corps, and Air Force operator capability. The Joint Interface Control Working Group is addressing this issue. Lessons learned in DT and Evaluation and OT and Evaluation will evolve this facet of aircrew training. Missile status tones used in AIM-9X will very closely approximate those used for AIM-9M to provide seamless transition for the aircrew; however, some tone modifications are necessary because AIM-9X is capable of employment where AIM-9M and prior Sidewinder missiles were not. For example, in certain aircraft/missile employment regimes, the AIM-9X "synthetic" tones duplicate or are very similar to previous AIM-9M tones, but do not represent the same tactics/threat situation. In these situations tone modifications are necessary.

K. SCHEDULES

1. Schedule of Events

a. Installation and Delivery Schedules. AIM-9X production and related ECP schedules will be incorporated into updates of this NTSP as they become available, and based upon their security classification. The Defense Acquisition Board (DAB) is scheduled to make the AIM-9X LRIP decision in September 2000. LRIP deliveries are scheduled for 21, 24, 27 and 30 months after each LRIP option (Lot 1, Lot 2, and Lot 3) is exercised. The F/A-18C/D Digital Wingtip Modification and associated ECPs will be developed in FY01 and their implementation will begin in the FY02/03 timeframe.

b. Ready For Operational Use Schedule. The AIM-9X will be Ready For Operational Use (RFOU) by the operational activity upon receipt of AUR missiles. Initially, activities will receive AIM-9X upon deployment aboard CV or CVN that have AIM-9X loadouts. Thus, the RFOU schedule is dependent upon the AIM-9X LRIP schedule and CV/CVN deployment schedules for FY03 and beyond. As the AIM-9X inventory grows, other activities will receive AIM-9X. See Element II.A.1.a of this NTSP for the notional operational and fleet support activity activation schedule.

c. Time Required to Install at Operational Sites. Because the AIM-9X is delivered and received as an AUR missile, there is no time requirement to install AIM-9X.

d. Foreign Military Sales and Other Source Delivery Schedule. NA

e. Training Device and Delivery Schedule. CATM, DATM, CEST, and PEST delivery schedules have not been determined at this time. The DAB is scheduled to make the AIM-9X LRIP decision in September 2000. All DATM, CEST, and PEST deliveries will be made during LRIP lots. Element IV.A.2 of this NTSP lists the USN and USMC TD requirements by activity. The quantities for the first three LRIP lots are shown below.

<u>TRAINING DEVICE</u>	<u>LRIP Lot 1</u>	<u>LRIP Lot 2</u>	<u>LRIP Lot 3</u>
CATM-9X	15	30	75
DATM-9X	6	8	16
CEST-9X	1	0	0
PEST-9X	6	0	0

(1) CATM-9X. CATM-9X deliveries will be made during LRIP lots and Full-rate Production lots. LRIP CATM deliveries are scheduled for 21, 24, 27 and 30 months after each LRIP option is exercised. The CATM-9X requirements listed in part IV.A.2 represent Navy and Marine Corps F/A-18 requirements only. Other aircraft platforms that may be integrated with AIM-9X during Follow-on Test and Evaluation would require additional CATM-9X assets to support proficiency training conducted by the associated operational squadrons. The 896 CATM-

9Xs represent an 86% asset readiness objective, for a total of 1042 CATM-9X for the F/A-18 community. Refer to part IV.A.2 for a detailed list of CATM-9X requirements by squadron.

(2) **DATM-9X.** LRIP DATM-9X deliveries are scheduled for 24 months after the LRIP Lot 1 option is exercised, 28 months after the LRIP Lot 2 option is exercised and 26 months after the LRIP Lot 3 option is exercised.

(3) **CEST-9X and PEST-9X.** LRIP CEST and PEST deliveries are scheduled for 21 months after the LRIP Lot 1 option is exercised.

L. GOVERNMENT FURNISHED EQUIPMENT AND CONTRACTOR FURNISHED EQUIPMENT TRAINING REQUIREMENTS. NA

M. RELATED NTSPs AND OTHER APPLICABLE DOCUMENTS

DOCUMENT TITLE	DOCUMENT NUMBER	PDA CODE	STATUS
F/A-18 Aircraft NTSP	A-50-7703H/D	PMA265	Draft 3/00
AIM-9X Single Acquisition Management Plan for the AIM-9X	No Number Assigned	PMA259	Approved 8/00
Test and Evaluation Master Plan (TEMP) for AIM-9X Sidewinder Missile	1412 Revision C	PMA259	Approved 8/00
Advanced Sidewinder Missile AIM-9X Cost Analysis Requirements Document (CARD)	No Number Assigned	PMA259	Approved 7/00
Navy and Air Force ALSP for Sidewinder AIM-9X	MS-371	AIR-3.1.1L	Approved 8/00
AIM-9M-8 Navy Training Plan	A-50-8105B	PMA205	Approved 1/97
Navy and Air Force Integrated Logistics Support Plan (ILSP) for Sidewinder AIM-9M	ILSP MS-059	AIR-3.1.1L	Approved 12/93

PART II - BILLET AND PERSONNEL REQUIREMENTS

The following elements are not affected by the AIM-9X and, therefore, are not included in Part II of this NTSP:

II.A. Billet Requirements

- II.A.2.a. Operational and Fleet Support Activity Deactivation Schedule
- II.A.2.b. Billets to be Deleted in Operational and Fleet Support Activities
- II.A.2.c. Total Billets to be Deleted in Operational and Fleet Support Activities

II.B. Personnel Requirements

- II.B.3. Foreign, Other Service, and Non-Military Personnel Annual Training Input Requirement

NOTE 1: This section of the AIM-9X NTSP reflects intermediate-level maintenance billet and personnel requirements for the AIM-9X. It is a compilation of two Navy NECs, AO 6801 and AO 6802, and one Marine Corps MOS, 6541. AIM-9X operator billets are programmed through the applicable aircraft NTSP, e.g., F/A-18C/D NTSP, as are the AIM-9X organizational-level billets. The addition of the AIM-9X to the intermediate-level workload is only a small percentage of the required workload for those NECs and MOS. The NECs and MOS are not dedicated to the AIM-9X and, therefore, the overall training throughput for the NEC and MOS will remain the same, i.e., it accounts for the total NEC/MOS community, and not just activities receiving AIM-9X.

NOTE 2: All billets identified in this section are programmed through other NTSPs, e.g., F/A-18 NTSP, applicable CV/CVN Class Total Ship NTSP, or applicable Shore Activity Manning Documents. The activities and associated billets are listed to assist the weapons training community in identifying and managing training requirements throughout the development, production, and deployment of the AIM-9X.

PART II - BILLET AND PERSONNEL REQUIREMENTS

II.A. BILLET REQUIREMENTS

II.A.1.a. OPERATIONAL AND FLEET SUPPORT ACTIVITY ACTIVATION SCHEDULE

SOURCE: NAVAIRSYSCOM PMA259/PMA205

DATE: 08/2000

ACTIVITY	UIC	PFYs	CFY00	FY01	FY02	FY03	FY04
OPERATIONAL	NAVY						
NAVWPNTSTRON CL	39787	1	0	0	0	0	0
NAVWPNTSTRON PM	39788	1	0	0	0	0	0
NAVSTKAIRSTRON	39783	1	0	0	0	0	0
VX-9	55646	1	0	0	0	0	0
VFA-106	09679	0	0	0	0	1	0
VFA-125	09485	0	0	0	0	1	0
VFA-15	09015	0	0	0	0	1	0
VFA-34	09070	0	0	0	0	1	0
VFA-37	09478	0	0	0	0	1	0
VFA-81	09221	0	0	0	0	1	0
VFA-82	09122	0	0	0	0	1	0
VFA-83	09223	0	0	0	0	1	0
VFA-86	09943	0	0	0	0	1	0
VFA-87	63922	0	0	0	0	1	0
VFA-105	65183	0	0	0	0	1	0
VFA-131	63934	0	0	0	0	1	0
VFA-136	55141	0	0	0	0	1	0
VFA-127	08956	0	0	0	0	1	0
VFA-22	09561	0	0	0	0	1	0
VFA-25	09637	0	0	0	0	1	0
VFA-94	09295	0	0	0	0	1	0
VFA-97	63923	0	0	0	0	1	0
VFA-113	09092	0	0	0	0	1	0
VFA-115	09604	0	0	0	0	1	0
VFA-137	55142	0	0	0	0	1	0
VFA-146	09063	0	0	0	0	1	0
VFA-147	63925	0	0	0	0	1	0
VFA-151	09558	0	0	0	0	1	0
VFA-27	65185	0	0	0	0	1	0
VFA-154	09678	0	0	0	0	1	0
VFA-192	55179	0	0	0	0	1	0
VFA-195	09706	0	0	0	0	1	0
VFA-203	09030	0	0	0	0	1	0
VFA-204	09032	0	0	0	0	1	0
NSAWC N7	69190	0	0	0	0	1	0
SFWSL	47084	0	0	0	0	1	0
SFWSP	35185	0	0	0	0	1	0
VFC-12	52994	0	0	0	0	0	0
VFC-13	52995	0	0	0	0	0	0
TOTAL:		4	0	0	0	33	0

N88-NTSP-A-50-9601A/P
August 2000

II.A.1.a. OPERATIONAL AND FLEET SUPPORT ACTIVITY ACTIVATION SCHEDULE

SOURCE: NAVAIRSYSCOM PMA259/PMA205

DATE: 08/2000

ACTIVITY	UIC	PFYs	CFY00	FY01	FY02	FY03	FY04
OPERATIONAL	USMC						
VMFA-115	09234	0	0	0	0	1	0
VMFA-122	09407	0	0	0	0	1	0
VMFA-251	09241	0	0	0	0	1	0
VMFA-312	09253	0	0	0	0	1	0
VMFA (AW)-224	01224	0	0	0	0	1	0
VMFA (AW)-332	09501	0	0	0	0	1	0
VMFA (AW)-533	09193	0	0	0	0	1	0
VMFA-212	09434	0	0	0	0	1	0
VMFA-232	09242	0	0	0	0	1	0
VMFA-235	09237	0	0	0	0	1	0
VMFA-314	09230	0	0	0	0	1	0
VMFA-323	09235	0	0	0	0	1	0
VMFA (AW)-121	09257	0	0	0	0	1	0
VMFA (AW)-225	09232	0	0	0	0	1	0
VMFA-112	08954	0	0	0	0	1	0
VMFA-134	09365	0	0	0	0	1	0
VMFA-142	67243	0	0	0	0	1	0
VMFA-321	67235	0	0	0	0	1	0
MALS Aug Beaufort	67863	0	0	0	0	1	0
MALS Aug Miramar	09111	0	0	0	0	1	0
MAWTS-1	55167	0	0	0	0	1	0
VMFAT-101	09965	0	0	0	0	1	0
TOTAL:		0	0	0	0	22	0
FLEET SUPPORT	NAVY						
NAS Fallon	60495	0	0	0	0	1	0
NAS Lemoore	63042	0	0	0	0	1	0
NAS Oceana	60191	0	0	0	0	1	0
NS Roosevelt Roads	00389	0	0	0	0	1	0
COMNAVAIRLANT	57012	0	0	0	0	1	0
CV-63 USS Kitty Hawk	03363	0	0	0	0	1	0
CV-64 USS Constellation	03364	0	0	0	0	1	0
CV-67 USS Kennedy	03367	0	0	0	0	1	0
CVN-65 USS Enterprise	03365	0	0	0	0	1	0
CVN-68 USS Nimitz	03368	0	0	0	0	1	0
CVN-69 USS Eisenhower	03369	0	0	0	0	1	0
CVN-70 USS Vinson	20993	0	0	0	0	1	0
CVN-71 USS Roosevelt	21247	0	0	0	0	1	0
CVN-72 USS Lincoln	21297	0	0	0	0	1	0
CVN-73 USS Washington	21412	0	0	0	0	1	0
CVN-74 USS Stennis	21847	0	0	0	0	1	0
CVN-75 USS Truman	21853	0	0	0	0	1	0
CVN-76 USS Reagan	TBD	0	0	0	0	0	1
NAWMU-1	52821	0	0	0	0	1	0
NAWCAD Patuxent River	00421	0	0	0	0	1	0

N88-NTSP-A-50-9601A/P
August 2000

II.A.1.a. OPERATIONAL AND FLEET SUPPORT ACTIVITY ACTIVATION SCHEDULE

SOURCE: NAVAIRSYSCOM PMA259/PMA205

DATE: 08/2000

ACTIVITY	UIC	PFYs	CFY00	FY01	FY02	FY03	FY04
NAWCWD Point Mugu	63126	0	0	0	0	1	0
NAWS Point Mugu	0429A	1	0	0	0	0	0
NAWS China Lake	68937	1	0	0	0	0	0
TOTAL:		2	0	0	0	20	1
FLEET SUPPORT	USMC						
MAD China Lake	67852	0	0	0	0	1	0
MAD Patuxent River	67356	0	0	0	0	1	0
MALS-11 Miramar	09111	0	0	0	0	1	0
MALS-12 Iwakuni	09377	0	0	0	0	1	0
MALS-13 Yuma	09041	0	0	0	0	1	0
MALS-31 Beaufort	09384	0	0	0	0	1	0
MALS-41 Fort Worth	67239	0	0	0	0	0	0
MALS-42 Marietta	67236	0	0	0	0	0	0
MALS-46 Miramar	67244	0	0	0	0	0	0
MASD Andrews	04801	0	0	0	0	0	0
TOTAL:		0	0	0	0	6	0

II.A.1.b. BILLETS REQUIRED FOR OPERATIONAL AND FLEET SUPPORT ACTIVITIES¹

ACTIVITY	UIC	PHASING INCR.	BILLETS OFF	ENL	DESIGN RATING	PNEC/SNEC PMOS/SMOS
OPERATIONAL	NAVY					
VFA-106	09679					
USMC			0	1		6541
ACTIVITY TOTAL:			0	1		
VFA-125	09485					
USMC			0	1		6541
ACTIVITY TOTAL:			0	1		
VAQ-129	09995					
USMC			0	1		6541
ACTIVITY TOTAL:			0	1		
VFA-203	09030					
TAR			0	1	AO	6802
SELRES			0	1	AO	6802
ACTIVITY TOTAL:			0	2		
VFA-204	09032					
TAR			0	1	AO	6802
SELRES			0	1	AO	6802
ACTIVITY TOTAL:			0	2		
VFC-12	52994					
TAR			0	1	AO	6802
SELRES			0	1	AO	6802
ACTIVITY TOTAL:			0	2		
VF-201	09309					
SELRES			0	2	AO	6802
ACTIVITY TOTAL:			0	2		
OPERATIONAL	USMC					
VMFA-115	09234					
USMC			0	10		6541
ACTIVITY TOTAL:			0	10		
VMFA-122	09407					
USMC			0	10		6541
ACTIVITY TOTAL:			0	10		
VMFA-251	09241					
USMC			0	10		6541
ACTIVITY TOTAL:			0	10		

¹All billet requirements shown are programmed in the F/A-18 NTSP, the applicable CV/CVN Class Total Ship NTSP, or applicable Shore Activity Manning Document, and are shown for planning of initial training requirements. Most initial training requirements for AIM-9X are phased in FY03 to coincide with Fleet introduction, but will be updated as carrier deployment schedules become available. These activities are highlighted to distinguish them from the billet community.

II.A.1.b. BILLETS REQUIRED FOR OPERATIONAL AND FLEET SUPPORT ACTIVITIES¹

ACTIVITY	UIC	PHASING INCR.	BILLETS OFF	ENL	DESIGN RATING	PNEC/SNEC PMOS/SMOS
VMFA-312	09253					
USMC				3		6541
AR			0	7		6541
ACTIVITY TOTAL:			0	10		
VMFA (AW)-224	01224					
USMC			0	11		6541
ACTIVITY TOTAL:			0	11		
VMFA (AW)-332	09501					
USMC			0	11		6541
ACTIVITY TOTAL:			0	11		
VMFA (AW)-533	09193					
USMC			0	11		6541
ACTIVITY TOTAL:			0	11		
VMFA-212	09434					
USMC			0	10		6541
ACTIVITY TOTAL:			0	10		
VMFA-232	09242					
USMC			0	10		6541
ACTIVITY TOTAL:			0	10		
VMFA-235	09237					
USMC			0	10		6541
ACTIVITY TOTAL:			0	10		
VMFA-314	09230					
USMC			0	10		6541
ACTIVITY TOTAL:			0	10		
VMFA-323	09235					
USMC			0	10		6541
ACTIVITY TOTAL:			0	10		
VMFA (AW)-121	09257					
USMC			0	11		6541
ACTIVITY TOTAL:			0	11		
VMFA (AW)-225	09232					
USMC			0	11		6541
ACTIVITY TOTAL:			0	11		
VMFA (AW)-242	09668					
USMC			0	11		6541
ACTIVITY TOTAL:			0	11		
VMFA-112	08954					
USMC			0	3		6541
AR			0	7		6541
ACTIVITY TOTAL:			0	10		
VMFA-134	09365					
USMC			0	7		6541
AR			0	3		6541
ACTIVITY TOTAL:			0	10		

II.A.1.b. BILLETS REQUIRED FOR OPERATIONAL AND FLEET SUPPORT ACTIVITIES¹

ACTIVITY	UIC	PHASING INCR.	BILLETS OFF ENL	DESIGN RATING	PNEC/SNEC PMOS/SMOS
VMFA-142	67243				
USMC			0 3		6541
AR			0 7		6541
ACTIVITY TOTAL:			0 10		
MALS Aug Beaufort	67863				
USMC			0 11		6541
ACTIVITY TOTAL:			0 11		
MALS Aug Miramar	09116				
USMC			0 4		6541
ACTIVITY TOTAL:			0 4		
MAWTS-1	55167				
USMC			0 2		6541
ACTIVITY TOTAL:			0 2		
VMFAT-101	09965				
USMC			0 9		6541
SELRES			0 2	AO	6802
ACDU			0 2	AO	6802
ACTIVITY TOTAL:			0 13		
HMH-461	09582				
USMC			0 6		6541
ACTIVITY TOTAL:			0 6		
HMH-464	53935				
USMC			0 6		6541
ACTIVITY TOTAL:			0 6		
HMH-772	09490				
USMC			0 2		6541
ACTIVITY TOTAL:			0 2		
HMLA-167	09898				
USMC			0 18		6541
ACTIVITY TOTAL:			0 18		
HMLA-269	08998				
USMC			0 18		6541
ACTIVITY TOTAL:			0 18		
HMLA-773	09431				
USMC			0 4		6541
AR			0 8		6541
ACTIVITY TOTAL:			0 12		
HLMA-775	55252				
USMC			0 4		
AR			0 8		6541
ACTIVITY TOTAL:			0 12		
HLMA-775 DET A	09415				
USMC			0 2		
AR			0 4		6541
ACTIVITY TOTAL:			0 6		

II.A.1.b. BILLETS REQUIRED FOR OPERATIONAL AND FLEET SUPPORT ACTIVITIES¹

ACTIVITY	UIC	PHASING INCR.	BILLETS OFF	ENL	DESIGN RATING	PNEC/SNEC PMOS/SMOS
HMM-162	09492					
USMC			0	2		6541
ACTIVITY TOTAL:			0	2		
HMM-261	09441					
USMC			0	2		6541
ACTIVITY TOTAL:			0	2		
HMM-263	09445					
USMC			0	2		6541
ACTIVITY TOTAL:			0	2		
HMM-264	09374					
USMC			0	2		6541
ACTIVITY TOTAL:			0	2		
HMM-266	53972					
USMC			0	2		6541
ACTIVITY TOTAL:			0	2		
HMM-365	53923					
USMC			0	2		6541
ACTIVITY TOTAL:			0	2		
HMM-774	09430					
USMC			0	2		6541
ACTIVITY TOTAL:			0	2		
HMT-303	55176					
USMC			0	6		6541
ACTIVITY TOTAL:			0	6		
VMA-223	09438					
USMC			0	12		6541
ACTIVITY TOTAL:			0	12		
VMA-231	52948					
USMC			0	12		6541
ACTIVITY TOTAL:			0	12		
VMA-542	52847					
USMC			0	12		6541
ACTIVITY TOTAL:			0	12		
VMAQ-1	41345					
USMC			0	1		6541
ACTIVITY TOTAL:			0	1		
VMAQ-2	42362					
USMC			0	1		6541
ACTIVITY TOTAL:			0	1		
VMAQ-3	42362					
USMC			0	1		6541
ACTIVITY TOTAL:			0	1		

II.A.1.b. BILLETS REQUIRED FOR OPERATIONAL AND FLEET SUPPORT ACTIVITIES¹

ACTIVITY	UIC	PHASING INCR.	BILLETS OFF	ENL	DESIGN RATING	PNEC/SNEC PMOS/SMOS
VMAQ-4	67837					
USMC			0	1		6541
ACTIVITY TOTAL:			0	1		
VMAT-203	45483					
USMC			0	5		6541
ACTIVITY TOTAL:			0	5		
HMH-361	09446					
USMC			0	6		6541
ACTIVITY TOTAL:			0	6		
HMH-362	09495					
USMC			0	2		6541
ACTIVITY TOTAL:			0	2		
HMH-363	09496					
USMC			0	2		6541
ACTIVITY TOTAL:			0	2		
HMH-366	55650					
USMC			0	2		6541
ACTIVITY TOTAL:			0	2		
HMH-462	09349					
USMC			0	6		6541
ACTIVITY TOTAL:			0	6		
HMH-463	09010					
USMC			0	2		6541
ACTIVITY TOTAL:			0	2		
HMH-465	53936					
USMC			0	6		6541
ACTIVITY TOTAL:			0	6		
HMH-466	53998					
USMC			0	6		6541
ACTIVITY TOTAL:			0	6		
HMH-769	09487					
AR			0	1		6541
ACTIVITY TOTAL:			0	1		
HMLA-169	09202					
USMC			0	18		6541
ACTIVITY TOTAL:			0	18		
HMLA-267	09159					
USMC			0	18		6541
ACTIVITY TOTAL:			0	18		
HMLA-367	09079					
USMC			0	18		6541
ACTIVITY TOTAL:			0	18		

II.A.1.b. BILLETS REQUIRED FOR OPERATIONAL AND FLEET SUPPORT ACTIVITIES¹

ACTIVITY	UIC	PHASING INCR.	BILLETS OFF	ENL	DESIGN RATING	PNEC/SNEC PMOS/SMOS
HMLA-369	09361					
USMC			0	18		6541
ACTIVITY TOTAL:			0	18		
HMM-161	09440					
USMC			0	2		6541
ACTIVITY TOTAL:			0	2		
HMM-163	09405					
USMC			0	2		6541
ACTIVITY TOTAL:			0	2		
HMM-164	09408					
USMC			0	2		6541
ACTIVITY TOTAL:			0	2		
HMM-165	09343					
USMC			0	2		6541
ACTIVITY TOTAL:			0	2		
HMM-166	53973					
USMC			0	2		6541
ACTIVITY TOTAL:			0	2		
HMM-262	09442					
USMC			0	2		6541
ACTIVITY TOTAL:			0	2		
HMM-265	09404					
USMC			0	2		6541
ACTIVITY TOTAL:			0	2		
HMM-268	52790					
USMC			0	2		6541
ACTIVITY TOTAL:			0	2		
HMM-364	09793					
USMC			0	2		6541
ACTIVITY TOTAL:			0	2		
HMM-764	09402					
USMC			0	2		6541
ACTIVITY TOTAL:			0	2		
VMA-211	09412					
USMC			0	12		6541
ACTIVITY TOTAL:			0	12		
VMA-214	09436					
USMC			0	12		6541
ACTIVITY TOTAL:			0	12		
VMA-311	09416					
USMC			0	12		6541
ACTIVITY TOTAL:			0	12		

N88-NTSP-A-50-9601A/P
August 2000

II.A.1.b. BILLETS REQUIRED FOR OPERATIONAL AND FLEET SUPPORT ACTIVITIES¹

ACTIVITY	UIC	PHASING INCR.	BILLETS OFF	ENL	DESIGN RATING	PNEC/SNEC PMOS/SMOS
VMA-513	09231					
USMC			0	12		6541
ACTIVITY TOTAL:			0	12		
VMFA-124	52998					
USMC			0	10		6541
ACTIVITY TOTAL:			0	10		
FLEET SUPPORT	NAVY					
COMNAVAIRLANT	57012					
ACDU			0	2	AO	6801
ACDU			0	1	AO	6802
ACTIVITY TOTAL:			0	3		
CV-63 USS Kitty Hawk	03363					
ACDU			0	11	AO	6801
ACDU			0	15	AO	6802
ACTIVITY TOTAL:			0	26		
CV-64 USS Constellation	03364					
ACDU			0	11	AO	6801
ACDU			0	8	AO	6802
ACTIVITY TOTAL:			0	19		
CV-67 USS Kennedy	03367					
ACDU			0	11	AO	6801
TAR			0	1	AO	6801
ACDU			0	7	AO	6802
TAR			0	1	AO	6802
SELRES			0	2	AO	6802
ACTIVITY TOTAL:			0	22		
CVN-65 USS Enterprise	03365					
ACDU			0	11	AO	6801
ACDU			0	8	AO	6802
ACTIVITY TOTAL:			0	19		
CVN-68 USS Nimitz	03368					
ACDU			0	11	AO	6801
ACDU			0	7	AO	6802
ACTIVITY TOTAL:			0	18		
CVN-69 USS Eisenhower	03369					
ACDU			0	11	AO	6801
ACDU			0	8	AO	6802
ACTIVITY TOTAL:			0	19		
CVN-70 USS Vinson	20993					
ACDU			0	11	AO	6801
ACDU			0	8	AO	6802
ACTIVITY TOTAL:			0	19		

II.A.1.b. BILLETS REQUIRED FOR OPERATIONAL AND FLEET SUPPORT ACTIVITIES¹

ACTIVITY	UIC	PHASING INCR.	BILLETS OFF	ENL	DESIGN RATING	PNEC/SNEC PMOS/SMOS
CVN-71 USS Roosevelt	21247					
ACDU			0	11	AO	6801
ACDU			0	8	AO	6802
ACTIVITY TOTAL:			0	19		
CVN-72 USS Lincoln	21297					
ACDU			0	11	AO	6801
ACDU			0	8	AO	6802
ACTIVITY TOTAL:			0	19		
CVN-73 USS Washington	21412					
ACDU			0	11	AO	6801
ACDU			0	7	AO	6802
ACTIVITY TOTAL:			0	18		
CVN-74 USS Stennis	21847					
ACDU			0	11	AO	6801
ACDU			0	8	AO	6802
ACTIVITY TOTAL:			0	19		
CVN-75 USS Truman	21853					
ACDU			0	10	AO	6801
ACDU			0	7	AO	6802
ACTIVITY TOTAL:			0	17		
CVN-76 USS Reagan	TBD					
ACDU		FY04	0	10	AO	6801
ACDU		FY04	0	7	AO	6802
ACTIVITY TOTAL:			0	17		
AFLOATRAGRU Norfolk CSTG	49085					
ACDU			0	2	AO	6801
ACTIVITY TOTAL:			0	2		
COMSTKFITWINGLANT Det Beaufort	3006A					
ACDU			0	16	AO	6801
ACTIVITY TOTAL:			0	16		
FASOTRAGRULANT	09810					
ACDU			0	2	AO	6801/ 9502
ACTIVITY TOTAL:			0	2		
LHA-2 USS Saipan	20632					
ACDU			0	2	AO	6801
ACDU			0	1	AO	6802
ACTIVITY TOTAL:			0	3		
LHA-4 USS Nassau	20725					
ACDU			0	2	AO	6801
ACDU			0	1	AO	6802
ACTIVITY TOTAL:			0	3		

II.A.1.b. BILLETS REQUIRED FOR OPERATIONAL AND FLEET SUPPORT ACTIVITIES¹

ACTIVITY	UIC	PHASING INCR.	BILLETS OFF ENL	DESIGN RATING	PNEC/SNEC PMOS/SMOS
LHD-1 USS Wasp	21560				
ACDU			0 2	AO	6801
ACDU			0 2	AO	6802
ACTIVITY TOTAL:			0 4		
LHD-3 USS Kearsarge	21700				
ACDU			0 2	AO	6801
ACDU			0 2	AO	6802
ACTIVITY TOTAL:			0 4		
LHD-5 USS Bataan	21879				
ACDU			0 2	AO	6801
ACDU			0 2	AO	6802
ACTIVITY TOTAL:			0 4		
MCS-12 USS Inchon	20009				
ACDU			0 1	AO	6801
TAR			0 1	AO	6802
ACTIVITY TOTAL:			0 2		
NAF Mildenhall	57032				
SELRES			0 1	AO	6801
ACTIVITY TOTAL:			0 1		
NAS Brunswick	60087				
ACDU			0 8	AO	6801
ACDU			0 1	AO	6810/ 6801
ACTIVITY TOTAL:			0 9		
NAS Cecil Field	60200				
ACDU			0 23	AO	6801
ACTIVITY TOTAL:			0 23		
NAS Keflavik	63032				
ACDU			0 3	AO	6801
ACDU			0 1	AO	6810/ 6801
ACDU			0 1	AO	0812/ 6801
ACTIVITY TOTAL:			0 5		
NAS Oceana	60191				
ACDU			0 3	AO	6801
ACTIVITY TOTAL:			0 3		
NATMSACT Kingsville	49149				
ACDU			0 1	AO	6801
ACTIVITY TOTAL:			0 1		
NAWMU-1	52821				
ACDU			0 23	AO	6801
ACDU			0 5	AO	6802
ACTIVITY TOTAL:			0 28		

II.A.1.b. BILLETS REQUIRED FOR OPERATIONAL AND FLEET SUPPORT ACTIVITIES¹

ACTIVITY	UIC	PHASING INCR.	BILLETS OFF	ENL	DESIGN RATING	PNEC/SNEC PMOS/SMOS
NAVSTKAIRTESTRON	39783					
ACDU			0	12	AO	6801
ACDU			0	2	AO	6801/ 8845
ACDU			0	1	AO	6801/ 9590
ACTIVITY TOTAL:			0	15		
Ordnance DET Oceana	31279					
ACDU			0	33	AO	6801
ACTIVITY TOTAL:			0	33		
SURFLANTAVORD/MTT Norfolk	48764					
ACDU			0	5	AO	6801
ACTIVITY TOTAL:			0	5		
AIRMAINTTRSGRPDET Whidbey Island	66058					
ACDU			0	5	AO	6801/ 9502
ACTIVITY TOTAL:			0	5		
COMFLTACT Okinawa	62254					
ACDU			0	2	AO	6801
ACTIVITY TOTAL:			0	2		
LHA-1 USS Tarawa	20550					
ACDU			0	2	AO	6801
ACDU			0	1	AO	6802
ACTIVITY TOTAL:			0	3		
LHA-3 USS Belleau Wood	20633					
ACDU			0	2	AO	6801
ACDU			0	1	AO	6802
ACTIVITY TOTAL:			0	3		
LHA-5 Peleliu	20748					
ACDU			0	2	AO	6801
ACDU			0	1	AO	6802
ACTIVITY TOTAL:			0	3		
LHD-2 USS Essex	21533					
ACDU			0	2	AO	6801
ACDU			0	2	AO	6802
ACTIVITY TOTAL:			0	4		
LHD-4 USS Boxer	21808					
ACDU			0	2	AO	6801
ACDU			0	2	AO	6802
ACTIVITY TOTAL:			0	4		
LHD-6 USS Bonhomme Richard	22202					
ACDU			0	2	AO	6801
ACDU			0	2	AO	6802
ACTIVITY TOTAL:			0	4		

II.A.1.b. BILLETS REQUIRED FOR OPERATIONAL AND FLEET SUPPORT ACTIVITIES¹

ACTIVITY	UIC	PHASING INCR.	BILLETS OFF	ENL	DESIGN RATING	PNEC/SNEC PMOS/SMOS
LHD-7 USS Iwo Jima	23027					
ACDU			0	2	AO	6801
ACTIVITY TOTAL:			0	2		
NAF El Centro	60042					
ACDU			0	7	AO	6801
ACTIVITY TOTAL:			0	7		
NAS Lemoore	63042					
ACDU			0	3	AO	6801
ACTIVITY TOTAL:			0	3		
NAS Point Mugu	0429A					
ACDU			0	18	AO	6801
ACDU			0	1	AO	8345/6801
ACTIVITY TOTAL:			0	19		
NAWCWD Point Mugu	63126					
ACDU			0	1	AO	6801
ACDU			0	1	AO	6802
ACTIVITY TOTAL:			0	2		
AIMD Atsugi	44323					
ACDU			0	4	AO	6802
ACTIVITY TOTAL:			0	4		
AIMD Cecil Field	60200					
ACDU			0	15	AO	6802
SELRES			0	2	AO	6802
ACTIVITY TOTAL:			0	17		
AIMD Fallon	44317					
ACDU			0	8	AO	6802
ACTIVITY TOTAL:			0	8		
AIMD Key West	44320					
ACDU			0	2	AO	6802
ACTIVITY TOTAL:			0	2		
AIMD Lemoore	44321					
ACDU			0	23	AO	6802
ACTIVITY TOTAL:			0	23		
AIMD North Island	44326					
ACDU			0	9	AO	6802
ACTIVITY TOTAL:			0	9		
AIMD Oceana	44327					
ACDU			0	73	AO	6802
ACTIVITY TOTAL:			0	73		
AIMD Roosevelt Roads	44373					
ACDU			0	5	AO	6802
ACTIVITY TOTAL:			0	5		
AIMD Sigonella	44330					
ACDU			0	2	AO	6802
ACTIVITY TOTAL:			0	2		

II.A.1.b. BILLETS REQUIRED FOR OPERATIONAL AND FLEET SUPPORT ACTIVITIES¹

ACTIVITY	UIC	PHASING INCR.	BILLETS OFF	ENL	DESIGN RATING	PNEC/SNEC PMOS/SMOS
AIMD Whidbey Island	44329					
ACDU			0	20	AO	6802
ACTIVITY TOTAL:			0	20		
RAIMD Atlanta	44486					
TAR			0	6	AO	6802
ACTIVITY TOTAL:			0	6		
RAIMD Fort Worth	44487					
TAR			0	3	AO	6802
ACTIVITY TOTAL:			0	3		
RAIMD New Orleans	44490					
TAR			0	2	AO	6802
ACTIVITY TOTAL:			0	2		
RAIMD Willow Grove	44493					
TAR			0	3	AO	6802
ACTIVITY TOTAL:			0	3		
SEAOPDET Cecil Field	46961					
ACDU			0	15	AO	6802
ACTIVITY TOTAL:			0	15		
SEAOPDET Lemoore	46964					
ACDU			0	11	AO	6802
ACTIVITY TOTAL:			0	11		
SEAOPDET North Island	46968					
ACDU			0	4	AO	6802
ACTIVITY TOTAL:			0	4		
SEAOPDET Oceana	46963					
ACDU			0	15	AO	6802
ACTIVITY TOTAL:			0	15		
NAS North Island	00246					
ACDU			0	3	AO	6802
ACTIVITY TOTAL:			0	3		
NAS Whidbey Island, VAN OPDET	31179					
ACDU			0	10	AO	6802
ACTIVITY TOTAL:			0	10		
NAVAIRESFOR Norfolk	63102					
TAR			0	1	AO	6802
ACTIVITY TOTAL:			0	1		
Naval Weapons Test Squadron, Point Mugu	39788					
ACDU			0	5	AO	6802
ACTIVITY TOTAL:			0	5		
Naval Weapons Test Squadron, China Lake	39787					
ACDU			0	1	AO	6802
ACTIVITY TOTAL:			0	1		

II.A.1.b. BILLETS REQUIRED FOR OPERATIONAL AND FLEET SUPPORT ACTIVITIES¹

ACTIVITY	UIC	PHASING INCR.	BILLETS OFF	ENL	DESIGN RATING	PNEC/SNEC PMOS/SMOS
NAWCWD China Lake	60530					
ACDU			0	1	AO	6802
ACTIVITY TOTAL:			0	1		
Naval Test Wing Atlantic	39782					
ACDU			0	1	AO	6802
ACDU			0	8	AO	6802
ACTIVITY TOTAL:			0	9		
FLEET SUPPORT	USMC					
MAD China Lake	67852					
USMC			0	2		6541
ACTIVITY TOTAL:			0	2		
MALS-11 Miramar	09233					
USMC			0	44		6541
ACTIVITY TOTAL:			0	44		
MALS-12 Iwakuni	09377					
USMC			0	44		6541
ACTIVITY TOTAL:			0	44		
MALS-13 Yuma	09041					
USMC			0	44		6541
ACTIVITY TOTAL:			0	44		
MALS-31 Beaufort	09384					
USMC			0	44		6541
ACTIVITY TOTAL:			0	44		
MALS-42 Marietta	09513					
USMC			0	2		6541
AR			0	10		6541
ACTIVITY TOTAL:			0	12		
MALS-41 Fort Worth	67239					
USMC			0	5		6541
AR			0	39		6541
ACTIVITY TOTAL:			0	44		
MALS-46 Miramar	67244					
USMC			0	2		6541
AR			0	42		6541
ACTIVITY TOTAL:			0	44		
MASD Andrews	04801					
USMC			0	1		6541
ACTIVITY TOTAL:			0	1		
2 nd MAW Cherry Point	00201					
USMC			0	1		6541
ACTIVITY TOTAL:			0	1		
4 th MAW New Orleans	00400					
USMC			0	1		6541
ACTIVITY TOTAL:			0	1		

II.A.1.b. BILLETS REQUIRED FOR OPERATIONAL AND FLEET SUPPORT ACTIVITIES¹

ACTIVITY	UIC	PHASING INCR.	BILLETS OFF	ENL	DESIGN RATING	PNEC/SNEC PMOS/SMOS
Blount Island	38450					
USMC			0	2		6541
ACTIVITY TOTAL:			0	2		
H&HS Beaufort	02031					
USMC			0	5		6541
ACTIVITY TOTAL:			0	5		
H&HS Cherry Point	02002					
USMC			0	17		6541
ACTIVITY TOTAL:			0	17		
H&HS New River	02021					
USMC			0	5		6541
ACTIVITY TOTAL:			0	5		
MALS-14 Cherry Point	09378					
USMC			0	44		6541
ACTIVITY TOTAL:			0	44		
MALS-26 New River	09167					
USMC			0	12		6541
ACTIVITY TOTAL:			0	12		
MALS-29 New River	52841					
USMC			0	12		6541
ACTIVITY TOTAL:			0	12		
MALS-49 Stewart New York	55555					
USMC			0	4		6541
AR			0	8		6541
ACTIVITY TOTAL:			0	12		
1 st MAW Futenma	00101					
USMC			0	1		6541
ACTIVITY TOTAL:			0	1		
3 rd MAW El Toro	00300					
USMC			0	1		6541
ACTIVITY TOTAL:			0	1		
H&HS Camp Pendleton	02208					
USMC			0	9		6541
ACTIVITY TOTAL:			0	9		
H&HS El Toro	02201					
USMC			0	8		6541
ACTIVITY TOTAL:			0	8		
H&HS Futenma	02601					
USMC			0	1		6541
ACTIVITY TOTAL:			0	1		
H&HS Iwakuni	02501					
USMC			0	7		6541
ACTIVITY TOTAL:			0	7		

II.A.1.b. BILLETS REQUIRED FOR OPERATIONAL AND FLEET SUPPORT ACTIVITIES¹

ACTIVITY	UIC	PHASING INCR.	BILLETS OFF	ENL	DESIGN RATING	PNEC/SNEC PMOS/SMOS
H&HS Yuma	02230					
USMC			0	18		6541
ACTIVITY TOTAL:			0	18		
MALS-16 Tustin	09243					
USMC			0	12		6541
ACTIVITY TOTAL:			0	12		
MALS-36 Futenma	09260					
USMC			0	12		6541
ACTIVITY TOTAL:			0	12		
MALS-39 Camp Pendleton	09808					
USMC			0	12		6541
ACTIVITY TOTAL:			0	12		
MALSE Kaneohe	02300					
USMC			0	4		6541
ACTIVITY TOTAL:			0	4		
MCAF Kaneohe	02303					
USMC			0	7		6541
ACTIVITY TOTAL:			0	7		

August 2000

II.A.1.c. TOTAL BILLETS REQUIRED FOR OPERATIONAL AND FLEET SUPPORT ACTIVITIES²

DESIGN RATING	PNEC/SNEC PMOS/SMOS	PFYs		CFY00		FY01		FY02		FY03		FY04	
		OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL
OPERATIONAL ACTIVITY – ACDU													
AO	6802	0	2	0	0	0	0	0	0	0	0	0	0
OPERATIONAL ACTIVITY – TAR													
AO	6802	0	3	0	0	0	0	0	0	0	0	0	0
OPERATIONAL ACTIVITY – SELRES													
AO	6802	0	7	0	0	0	0	0	0	0	0	0	0
OPERATIONAL ACTIVITY – USMC													
	6541	0	492	0	0	0	0	0	0	0	0	0	0
OPERATIONAL ACTIVITY – AR													
	6541	0	45	0	0	0	0	0	0	0	0	0	0
FLEET SUPPORT ACTIVITY – ACDU													
	0812/6801	0	1	0	0	0	0	0	0	0	0	0	0
	6801	0	318	0	0	0	0	0	0	0	0	0	10
	6801/8845	0	2	0	0	0	0	0	0	0	0	0	0
	6801/9502	0	7	0	0	0	0	0	0	0	0	0	0
	6801/9590	0	1	0	0	0	0	0	0	0	0	0	0
	6802	0	358	0	0	0	0	0	0	0	0	0	7
	6810/6801	0	2	0	0	0	0	0	0	0	0	0	0
	8345/6801	0	1	0	0	0	0	0	0	0	0	0	0
FLEET SUPPORT ACTIVITY – TAR													
AO	6801	0	1	0	0	0	0	0	0	0	0	0	0
AO	6802	0	17	0	0	0	0	0	0	0	0	0	0
FLEET SUPPORT ACTIVITY - SELRES													
AO	6802	0	4	0	0	0	0	0	0	0	0	0	0
FLEET SUPPORT ACTIVITY – USMC													
	6541	0	383	0	0	0	0	0	0	0	0	0	0
FLEET SUPPORT ACTIVITY – AR													
	6541	0	99	0	0	0	0	0	0	0	0	0	0
SUMMARY TOTAL:													
OPERATIONAL ACTIVITY – ACDU													
		0	2	0	0	0	0	0	0	0	0	0	0
OPERATIONAL ACTIVITY – TAR													
		0	3	0	0	0	0	0	0	0	0	0	0
OPERATIONAL ACTIVITY – SELRES													
		0	7	0	0	0	0	0	0	0	0	0	0
OPERATIONAL ACTIVITY – USMC													
		0	492	0	0	0	0	0	0	0	0	0	0
OPERATIONAL ACTIVITY – AR													
		0	45	0	0	0	0	0	0	0	0	0	0
FLEET SUPPORT ACTIVITY – ACDU													
		0	690	0	0	0	0	0	0	0	0	0	17

² All billet requirements shown are programmed in the F/A-18 NTSP, the applicable CV/CVN Class Total Ship NTSP, or applicable Shore Activity Manning Document, and are shown for planning of initial training requirements. Most initial training requirements for AIM-9X are phased in FY03 to coincide with Fleet introduction, but will be updated as carrier deployment schedules become available.

II.A.1.c. TOTAL BILLETS REQUIRED FOR OPERATIONAL AND FLEET SUPPORT ACTIVITIES²

DESIGN RATING	PNEC/SNEC PMOS/SMOS	PFYs		CFY00		FY01		FY02		FY03		FY04	
		OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL
FLEET SUPPORT ACTIVITY – TAR													
		0	18	0	0	0	0	0	0	0	0	0	0
FLEET SUPPORT ACTIVITY – SELRES													
		0	4	0	0	0	0	0	0	0	0	0	0
FLEET SUPPORT ACTIVITY – USMC													
		0	383	0	0	0	0	0	0	0	0	0	0
FLEET SUPPORT ACTIVITY – AR													
		0	99	0	0	0	0	0	0	0	0	0	0
GRAND TOTAL:													
	ACDU	0	692	0	0	0	0	0	0	0	0	0	17
	TAR	0	21	0	0	0	0	0	0	0	0	0	0
	SELRES	0	11	0	0	0	0	0	0	0	0	0	0
	USMC	0	875	0	0	0	0	0	0	0	0	0	0
	AR	0	144	0	0	0	0	0	0	0	0	0	0

August 2000

II.A.3. TRAINING ACTIVITIES INSTRUCTOR AND SUPPORT BILLET REQUIREMENTS³

INSTRUCTOR BILLETS

TRAINING ACTIVITY, LOCATION, UIC: MTU-4030 NAMTRAGRUDET NS Mayport 66069													
DESIGN	PNEC/SNEC	PFYs		CY00		FY01		FY02		FY03		FY04	
RATING	PMOS/SMOS	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL
ACDU													
AO	6801/9502	0	4	0	4	0	4	0	4	0	4	0	4
SELRES													
AO	6801/9502	0	1	0	1	0	1	0	1	0	1	0	1
TOTAL:		0	5	0	5	0	5	0	5	0	5	0	5

TRAINING ACTIVITY, LOCATION, UIC: MTU-4032 NAMTRAU NAS Norfolk 66046													
DESIGN	PNEC/SNEC	PFYs		CY00		FY01		FY02		FY03		FY04	
RATING	PMOS/SMOS	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL
ACDU													
AO	6801/9502	0	7	0	7	0	7	0	7	0	7	0	7
SELRES													
AO	6801/9502	0	2	0	2	0	2	0	2	0	2	0	2
TOTAL:		0	9	0	9	0	9	0	9	0	9	0	9

TRAINING ACTIVITY, LOCATION, UIC: MTU-4033 NAMTRAU NAS North Island 66065													
DESIGN	PNEC/SNEC	PFYs		CY00		FY01		FY02		FY03		FY04	
RATING	PMOS/SMOS	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL
ACDU													
AO	6801/9502	0	4	0	4	0	4	0	4	0	4	0	4

TRAINING ACTIVITY, LOCATION, UIC: MTU-4034 VMAT-203 FREST MCAS Cherry Point 66047													
DESIGN	PNEC/SNEC	PFYs		CY00		FY01		FY02		FY03		FY04	
RATING	PMOS/SMOS	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL
USMC													
MOS	6541	0	21	0	21	0	21	0	21	0	21	0	21

TRAINING ACTIVITY, LOCATION, UIC: MTU-4035 NAMTRAU NAS Whidbey Island 66058													
DESIGN	PNEC/SNEC	PFYs		CY00		FY01		FY02		FY03		FY04	
RATING	PMOS/SMOS	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL
ACDU													
AO	6801/9502	0	4	0	4	0	4	0	4	0	4	0	4

³ Instructor billet requirements shown are for the total course throughput for applicable NEC/MOS, not just throughput required to support AIM-9X.

II.A.4. CHARGEABLE STUDENT BILLET REQUIREMENTS⁴

ACTIVITY, LOCATION, UIC	USN/ USMC	PFYs		CY00		FY01		FY02		FY03		FY04	
		OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL
MTU 4030 NAMTRAGRUDET, NS Mayport, 66069	USN	0	0.8	0	0.8	0	0.8	0	0.8	0	0.8	0	0.8
MTU 4032 NAMTRAU, NAS Norfolk, 66046	USN	0	4.9	0	5.1	0	5.1	0	5.1	0	5.1	0	5.1
MTU 4033 NAMTRAU, NAS North Island, 66065	USN	0	3.8	0	3.8	0	3.8	0	3.8	0	3.8	0	3.8
MTU 4034 VMAT-203 FREST, MCAS Cherry Point, 66047	USMC	0	55.6	0	55.6	0	55.6	0	55.6	0	55.6	0	55.6
MTU 4035 NAMTRAU, NAS Whidbey Island, 66058	USN	0	0.1	0	0.8	0	0.8	0	0.8	0	0.8	0	0.8
SUMMARY TOTAL:													
	USN	0	9.6	0	10.5	0	10.5	0	10.5	0	10.5	0	10.5
	USMC	0	55.6	0	55.6	0	55.6	0	55.6	0	55.6	0	55.6
GRAND TOTAL:		0	65.2	0	66.1	0	66.1	0	66.1	0	66.1	0	66.1

⁴ Chargeable student billet requirements shown are for the total course throughput for applicable NEC/MOS, not just throughput required to support AIM-9X.

August 2000

II.A.5. ANNUAL INCREMENTAL AND CUMULATIVE BILLETS⁵

a. OFFICER - USN: NA

b. ENLISTED - USN:

RATING	PNEC/SNEC	BILLET BASE	CY00		FY01		FY02		FY03		FY04	
			+/-	CUM	+/-	CUM	+/-	CUM	+/-	CUM	+/-	CUM
Operational Billets ACDU and TAR												
AO	6802	5	0	5	0	5	0	5	0	5	0	5
Fleet Support Billets ACDU and TAR												
AO	0812/6801	1	0	1	0	1	0	1	0	1	0	1
AO	6801	319	0	319	0	319	0	319	0	319	+10	329
AO	6801/8845	2	0	2	0	2	0	2	0	2	0	2
AO	6801/9502	7	0	7	0	7	0	7	0	7	0	7
AO	6801/9590	1	0	1	0	1	0	1	0	1	0	1
AO	6802	375	0	375	0	375	0	375	0	375	+7	382
AO	6810/6801	2	0	2	0	2	0	2	0	2	0	2
AO	8345/6801	1	0	1	0	1	0	1	0	1	0	1
Instructor and Support (Staff) Billets ACDU and TAR												
AO	6801/9502	19	0	19	0	19	0	19	0	19	0	19
Chargeable Student Billets ACDU and TAR												
		10	1	11	0	11	0	11	0	11	0	11
TOTAL USN ENLISTED BILLETS:												
Operational		5	0	5	0	5	0	5	0	5	0	5
Fleet Support		708	0	708	0	708	0	708	0	708	+17	725
Staff		19	0	19	0	19	0	19	0	19	0	19
Student		10	1	11	0	11	0	11	0	11	0	11
SELRES		14	0	14	0	14	0	14	0	14	0	14

⁵ Billets are programmed through applicable CV/CVN Class Total Ship NTSPs and Shore Activity Manning Documents.

II.A.5. ANNUAL INCREMENTAL AND CUMULATIVE BILLETS⁵

c. OFFICER - USMC: NA

b. ENLISTED - USMC:

RATING	PMOS/SMOS	BILLET BASE	CY00		FY01		FY02		FY03		FY04	
			+/-	CUM	+/-	CUM	+/-	CUM	+/-	CUM	+/-	CUM
Operational Billets USMC and AR												
	6541	537	0	537	0	537	0	537	0	537	0	537
Fleet Support Billets USMC and AR												
	6541	482	0	482	0	482	0	482	0	482	0	482
Instructor and Support (Staff) Billets USMC and AR												
	6541	21	0	21	0	21	0	21	0	21	0	21
Chargeable Student Billets USMC and AR												
		56	0	56	0	56	0	56	0	56	0	56
TOTAL USMC ENLISTED BILLETS:												
Operational		537	0	537	0	537	0	537	0	537	0	537
Fleet Support		482	0	482	0	482	0	482	0	482	0	482
Staff		21	0	21	0	21	0	21	0	21	0	21
Student		56	0	56	0	56	0	56	0	56	0	56
SMCR		0	0	0	0	0	0	0	0	0	0	0

August 2000

II.B. PERSONNEL REQUIREMENTS

II.B.1. ANNUAL TRAINING INPUT REQUIREMENTS⁶

CIN, COURSE TITLE: D-646-7001, Strike Armament Equipment Intermediate Maintenance

COURSE LENGTH: 9.0 Weeks

SEA TOUR LENGTH: Navy: 60 Months

ATTRITION FACTOR: Navy: 10 %

BACKOUT FACTOR: 0.12

TRAINING ACTIVITY	SOURCE	ACDU-TAR SELRES	CY00		FY01		FY02		FY03		FY04	
			OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL
MTU-4032 NAMTRAU, NAS Norfolk												
	USN	ACDU-TAR	0	36	0	47	0	47	0	47	0	47
	USN	SELRES	0	0	0	0	0	0	0	0	0	0
		TOTAL	0	36	0	47	0	47	0	47	0	47

CIN, COURSE TITLE: E-646-7001, Strike Armament Equipment Intermediate Maintenance

COURSE LENGTH: 9.0 Weeks

SEA TOUR LENGTH: Navy: 60 Months

ATTRITION FACTOR: Navy: 10 %

BACKOUT FACTOR: 0.12

TRAINING ACTIVITY	SOURCE	ACDU-TAR SELRES	CY00		FY01		FY02		FY03		FY04	
			OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL
MTU-4033 NAMTRAU, NAS North Island												
	USN	ACDU-TAR	0	33	0	33	0	33	0	33	0	33
	USN	SELRES	0	0	0	0	0	0	0	0	0	0
		TOTAL	0	33	0	33	0	33	0	33	0	33

CIN, COURSE TITLE: D-646-7007, General Shipboard/NAS Weapons Department AVORD Maintenance

COURSE LENGTH: 6.0 Weeks

SEA TOUR LENGTH: Navy: 60 Months

ATTRITION FACTOR: Navy: 10 %

BACKOUT FACTOR: 0.12

TRAINING ACTIVITY	SOURCE	ACDU-TAR SELRES	CY00		FY01		FY02		FY03		FY04	
			OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL
MTU-4030 NAMTRAGRUDET, NS Mayport												
	USN	ACDU-TAR	0	17	0	32	0	32	0	32	0	32
MTU-4032 NAMTRAU, NAS Norfolk												
	USN	ACDU-TAR	0	60	0	60	0	60	0	60	0	60
	USN	SELRES	0	0	0	0	0	1	0	0	0	0
		TOTAL	0	60	0	60	0	61	0	60	0	60

⁶ ATIR shown are for the total course throughput for applicable NEC/MOS, not just throughput required to support AIM-9X. NITRAS data from NAMTRAGRU was used in lieu of ATIR calculations. The affected training tracks contain curricula for multiple weapon systems and have been established for a sufficient number of years to have reached a steady state value using the ATIR calculations.

August 2000

II.B.1. ANNUAL TRAINING INPUT REQUIREMENTS (Continued)⁶

CIN, COURSE TITLE: E-646-7007, General Shipboard/NAS Weapons Department AVORD Maintenance

COURSE LENGTH: 6.0 Weeks

SEA TOUR LENGTH: Navy: 60 Months

ATTRITION FACTOR: Navy: 10 %

BACKOUT FACTOR: 0.12

TRAINING ACTIVITY	SOURCE	ACDU-TAR SELRES	CY00		FY01		FY02		FY03		FY04	
			OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL
MTU-4033 NAMTRAU, NAS North Island												
	USN	ACDU-TAR	0	45	0	45	0	45	0	45	0	45
	USN	SELRES	0	1	0	1	0	1	0	1	0	1
		TOTAL	0	46	0	46	0	46	0	46	0	46
MTU-4035 NAMTRAU, NAS Whidbey Island ⁷												
	USN	ACDU-TAR	0	45	0	45	0	45	0	45	0	45

CIN, COURSE TITLE: M-646-7026, Aircraft Ordnance Intermediate Maintenance

COURSE LENGTH: 11 Weeks

SEA TOUR LENGTH: NA

ATTRITION FACTOR: Marine: 0 %

BACKOUT FACTOR: 0.21

TRAINING ACTIVITY	SOURCE	USMC-AR SMCR	CY00		FY01		FY02		FY03		FY04	
			OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL
MTU-4034 VMAT-203 FREST, MCAS Cherry Point												
	USMC	USMC-AR	0	273	0	285	0	285	0	285	0	285

ACTIVITY TOTAL:

MTU-4030 NAMTRAGRU DET	0	17	0	32	0	32	0	32	0	32	0	32
MTU-4032 NAMTRAU	0	96	0	107	0	108	0	107	0	107	0	107
MTU-4033 NAMTRAU	0	79	0	79	0	79	0	79	0	79	0	79
MTU-4034 VMAT-203 FREST	0	273	0	285	0	285	0	285	0	285	0	285
MTU-4035 NAMTRAU	0	45	0	45	0	45	0	45	0	45	0	45

PART III - TRAINING REQUIREMENTS

The following elements are not affected by the AIM-9X and, therefore, are not included in this NTSP.

- III.A. Training Course Requirements
 - III.A.2 Follow-on Training
 - III.A.2.b. Planned Courses
 - III.A.2.c. Unique Courses
 - III.A.3. Existing Training Phased Out
- III.B. Total Ship Training Course Summary
- III.C. Inactive Duty Training Travel and Annual Training Summary

August 2000

III.A. TRAINING COURSE REQUIREMENTS**III.A.1. INITIAL TRAINING REQUIREMENTS**

COURSE TITLE: AIM-9X Theory of Operation & AIM-9X/F/A-18C/D Aircrew Procedures
COURSE DEVELOPER: RMS
INSTRUCTOR: Walter Murphy/Richard Garcia
COURSE LENGTH: Lecture 1 day/Practice (simulator) 2 days

LOCATION, UIC	DATE BEGIN	STUDENTS			CIV	ACTIVITY DESTINATION
		OFF	ENL			
Boeing St. Louis, MO, NA	15 SEP 98	11	0	4	Input	(DT-IIB/C) NAWCWD, AWL, and NAWCAD
		0.09	0	0.01	AOB	
		0.09	0	0.01	Chargeable	
Boeing St. Louis, MO, NA	14 JUL 99	5	0	0	Input	(OT-IIA) VX-9, 55646
		0.04	0	0	AOB	
		0.04	0	0	Chargeable	
VX-9, 55646	SEP 01	6	0	0	Input	(OT-IIB) VX-9, 55646
		0.05	0	0	AOB	
		0.05	0	0	Chargeable	

COURSE TITLE: AIM-9X Loading on the F/A-18C/D Aircraft
COURSE DEVELOPER: RMS
INSTRUCTOR: Walter Murphy
COURSE LENGTH: 1 day

LOCATION, UIC	DATE BEGIN	STUDENTS			CIV	ACTIVITY DESTINATION
		OFF	ENL			
NAVPNTTESTRON CL, 39787	30 JUN 98	0	7	0	Input	(DT-IIB/C) NAWCWD CL and NAWCWD PM
		0	0.02	0	AOB	
		0	0.02	0	Chargeable	
VX-9, 55646	8 SEP 99	0	12	0	Input	(OT-IIA) VX-9, 55646
		0	0.03	0	AOB	
		0	0.03	0	Chargeable	
VX-9, 55646	SEP 01	0	12	0	Input	(OT-IIB) VX-9, 55646
		0	0.03	0	AOB	
		0	0.03	0	Chargeable	

COURSE TITLE: AIM-9X/LAU-7D/A Release and Control Checks on the F/A-18C/D Aircraft
COURSE DEVELOPER: RMS
INSTRUCTOR: Walter Murphy
COURSE LENGTH: 1 day

LOCATION, UIC	DATE BEGIN	STUDENTS			CIV	ACTIVITY DESTINATION
		OFF	ENL			
VX-9, 55646	SEP 01	0	12	0	Input	(OT-IIB) VX-9, 55646
		0	0.03	0	AOB	
		0	0.03	0	Chargeable	

August 2000

III.A.1. INITIAL TRAINING REQUIREMENTS

COURSE TITLE: AIM-9X Handling and Storage, Packaging and Storing, Inspections, & Remove/Replace Items
COURSE DEVELOPER: RMS
INSTRUCTOR: Walter Murphy
COURSE LENGTH: 1 day

LOCATION, UIC	DATE BEGIN	STUDENTS OFF	ENL	CIV	ACTIVITY DESTINATION
NAWS China Lake, 68937	9 SEP 99	0	0	4	Input (OT-IIA) NAWS China Lake, 68937
		0	0	0.01	AOB
		0	0	0.01	Chargeable
VX-9, 55646	JUL 00	0	2	0	Input (CCRP) VX-9, 55646
		0	0.01	0	AOB
		0	0.01	0	Chargeable
VX-9, 55646	SEP 01	0	8	0	Input (OT-IIB) VX-9, 55646
		0	0.02	0	AOB
		0	0.02	0	Chargeable

COURSE TITLE: AIM-9X Off-Aircraft BIT & Reprogramming Procedures
COURSE DEVELOPER: RMS
INSTRUCTOR: Walter Murphy
COURSE LENGTH: 1 day

LOCATION, UIC	DATE BEGIN	STUDENTS OFF	ENL	CIV	ACTIVITY DESTINATION
VX-9, 55646	JUL 00	0	2	0	Input (CCRP) VX-9, 55646
		0	0.01	0	AOB
		0	0.01	0	Chargeable
VX-9, 55646	SEP 01	0	8	0	Input (OT-IIB) VX-9, 55646
		0	0.02	0	AOB
		0	0.02	0	Chargeable

August 2000

III.A.1. INITIAL TRAINING REQUIREMENTS

COURSE TITLE: AIM-9X Aircrew Familiarization
COURSE DEVELOPER: NSAWC N7/NAWCWD AWL
INSTRUCTOR: NSAWC N7
COURSE LENGTH: 1 day

LOCATION, UIC	DATE BEGIN	STUDENTS		CIV	ACTIVITY DESTINATION
		OFF	ENL		
SFWSP, 35185	FY03	20	0	0	Input
		0.05	0	0	AOB
		0.05	0	0	Chargeable
SFWSL, 47084	FY03	20	0	0	Input
		0.05	0	0	AOB
		0.05	0	0	Chargeable
MAWTS-1, 55167	FY03	20	0	0	Input
		0.05	0	0	AOB
		0.05	0	0	Chargeable
VFA-125, 09485	FY03	20	0	0	Input
		0.05	0	0	AOB
		0.05	0	0	Chargeable
VFA-106, 09679	FY03	20	0	0	Input
		0.05	0	0	AOB
		0.05	0	0	Chargeable
VMFAT-101, 09965	FY03	20	0	0	Input
		0.05	0	0	AOB
		0.05	0	0	Chargeable

COURSE TITLE: AIM-9X Organizational Maintenance for the F/A-18C/D Aircraft
COURSE DEVELOPER: NAWCWD
INSTRUCTOR: TBD
COURSE LENGTH: 1 day

LOCATION, UIC	DATE BEGIN	STUDENTS		CIV	ACTIVITY DESTINATION
		OFF	ENL		
SFWSP, 35185	FY03	0	20	0	Input
		0	0.05	0	AOB
		0	0.05	0	Chargeable
SFWSL, 47084	FY03	0	20	0	Input
		0	0.05	0	AOB
		0	0.05	0	Chargeable
NATTC AO "A" School, 63082	FY03	0	20	0	Input
		0	0.05	0	AOB
		0	0.05	0	Chargeable

III.A.1. INITIAL TRAINING REQUIREMENTS

COURSE TITLE: AIM-9X Intermediate Maintenance
COURSE DEVELOPER: NAWCWD
INSTRUCTOR: TBD
COURSE LENGTH: 2 days

LOCATION, UIC	DATE BEGIN	STUDENTS			ACTIVITY DESTINATION
		OFF	ENL	CIV	
MTU-4030, 66069	FY03	0	5	0	Input
		0	0.01	0	AOB
		0	0.01	0	Chargeable
MTU-4032, 66046	FY03	0	5	0	Input
		0	0.01	0	AOB
		0	0.01	0	Chargeable
MTU-4033, 66065	FY03	0	5	0	Input
		0	0.01	0	AOB
		0	0.01	0	Chargeable
MTU 4034, VMAT-203 FREST, 66047	FY03	0	5	0	Input
		0	0.01	0	AOB
		0	0.01	0	Chargeable
MTU-4035, 66058	FY03	0	5	0	Input
		0	0.01	0	AOB
		0	0.01	0	Chargeable
NATTC AO "A" School, 63082	FY03	0	5	0	Input
		0	0.01	0	AOB
		0	0.01	0	Chargeable
NAWMU-1, 52821	FY03	0	20	0	Input
		0	0.05	0	AOB
		0	0.05	0	Chargeable
CV/CVN TBD (West Coast) (If possible on-board during in-port period)	FY03	0	20	0	Input
		0	0.05	0	AOB
		0	0.05	0	Chargeable
CV/CVN TBD (East Coast) (If possible on-board during in-port period)	FY03	0	20	0	Input
		0	0.05	0	AOB
		0	0.05	0	Chargeable

NOTE: Updated information on initial training will be incorporated into this NTSP, as it becomes available.

August 2000

III.A.2. FOLLOW-ON TRAINING**III.A.2.a. EXISTING COURSES****TRAINING ACTIVITY:** MTU-4030 NAMTRAGRUDET**LOCATION, UIC:** NS Mayport, 66069**CIN, COURSE TITLE:** D-646-7007, General Shipboard/NAS Weapons Department AVORD Maintenance**SOURCE:** NAVY **STUDENT CATEGORY:** ACDU-TAR

CY00		FY01		FY02		FY03		FY04		
OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	
0	17.0	0	32.0	0	32.0	0	32.0	0	32.0	ATIR ⁶
0	15.3	0	28.8	0	28.8	0	28.8	0	28.8	Output
0	2.0	0	3.7	0	3.7	0	3.7	0	3.7	AOB
0	2.0	0	3.7	0	3.7	0	3.7	0	3.7	Chargeable

TRAINING ACTIVITY: MTU-4032 NAMTRAU**LOCATION, UIC:** NAS Norfolk, 66046**CIN, COURSE TITLE:** D-646-7001, Strike Armament Equipment Intermediate Maintenance**SOURCE:** NAVY **STUDENT CATEGORY:** ACDU-TAR

CY00		FY01		FY02		FY03		FY04		
OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	
0	36.0	0	47.0	0	47.0	0	47.0	0	47.0	ATIR ⁶
0	32.4	0	42.3	0	42.3	0	42.3	0	42.3	Output
0	6.2	0	8.1	0	8.1	0	8.1	0	8.1	AOB
0	0	0	0	0	0	0	0	0	0	Chargeable

CIN, COURSE TITLE: D-646-7007, General Shipboard/NAS Weapons Department AVORD Maintenance**SOURCE:** NAVY **STUDENT CATEGORY:** ACDU-TAR

CY00		FY01		FY02		FY03		FY04		
OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	
0	60.0	0	60.0	0	60.0	0	60.0	0	60.0	ATIR ⁶
0	54.0	0	54.0	0	54.0	0	54.0	0	54.0	Output
0	6.9	0	6.9	0	6.9	0	6.9	0	6.9	AOB
0	6.9	0	6.9	0	6.9	0	6.9	0	6.9	Chargeable

SOURCE: NAVY **STUDENT CATEGORY:** SELRES

CY00		FY01		FY02		FY03		FY04		
OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	
0	0	0	0	0	1.0	0	0	0	0	ATIR ⁶
0	0	0	0	0	1.0	0	0	0	0	Output
0	0	0	0	0	0.1	0	0	0	0	AOB
0	0	0	0	0	0.0	0	0	0	0	Chargeable

⁶ ATIR shown are for the total course throughput for applicable NEC/MOS, not just throughput required to support AIM-9X. NITRAS data from NAMTRAGRU was used in lieu of ATIR calculations. The affected training tracks contain curricula for multiple weapon systems and have been established for a sufficient number of years to have reached a steady state value using the ATIR calculations.

III.A.2.a. EXISTING COURSES

TRAINING ACTIVITY: MTU-4033 NAMTRAU

LOCATION, UIC: NAS North Island, 66065

CIN, COURSE TITLE: E-646-7001, Strike Armament Equipment Intermediate Maintenance

SOURCE: NAVY STUDENT CATEGORY: ACDU-TAR

CY00		FY01		FY02		FY03		FY04		
OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	
0	33.0	0	33.0	0	33.0	0	33.0	0	33.0	ATIR ⁶
0	29.7	0	29.7	0	29.7	0	29.7	0	29.7	Output
0	5.7	0	5.7	0	5.7	0	5.7	0	5.7	AOB
0	5.7	0	5.7	0	5.7	0	5.7	0	5.7	Chargeable

SOURCE: NAVY STUDENT CATEGORY: SELRES

CY00		FY01		FY02		FY03		FY04		
OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	
0	1.0	0	1.0	0	1.0	0	1.0	0	1.0	ATIR ⁶
0	1.0	0	1.0	0	1.0	0	1.0	0	1.0	Output
0	0.1	0	0.1	0	0.1	0	0.1	0	0.1	AOB
0	0.1	0	0.1	0	0.1	0	0.1	0	0.1	Chargeable

CIN, COURSE TITLE: E-646-7007, General Shipboard/NAS Weapons Department AVORD Maintenance

SOURCE: NAVY STUDENT CATEGORY: ACDU-TAR

CY00		FY01		FY02		FY03		FY04		
OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	
0	45.0	0	45.0	0	45.0	0	45.0	0	45.0	ATIR ⁶
0	40.5	0	40.5	0	40.5	0	40.5	0	40.5	Output
0	5.2	0	5.2	0	5.2	0	5.2	0	5.2	AOB
0	5.2	0	5.2	0	5.2	0	5.2	0	5.2	Chargeable

SOURCE: NAVY STUDENT CATEGORY: SELRES

CY00		FY01		FY02		FY03		FY04		
OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	
0	1.0	0	1.0	0	1.0	0	1.0	0	1.0	ATIR ⁶
0	1.0	0	1.0	0	1.0	0	1.0	0	1.0	Output
0	0.1	0	0.1	0	0.1	0	0.1	0	0.1	AOB
0	0.1	0	0.1	0	0.1	0	0.1	0	0.1	Chargeable

TRAINING ACTIVITY: MTU-4034 VMAT-203 FREST

LOCATION, UIC: MCAS Cherry Point, 45483

CIN, COURSE TITLE: M-646-7026, Aircraft Ordnance Intermediate Maintenance

SOURCE: USMC STUDENT CATEGORY: USMC - AR

CY00		FY01		FY02		FY03		FY04		
OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	
0	273	0	285	0	285	0	285	0	285	ATIR ⁶
0	246	0	257	0	257	0	257	0	257	Output
0	57.6	0	60.1	0	60.1	0	60.1	0	60.1	AOB
0	60.1	0	60.1	0	60.1	0	60.1	0	60.1	Chargeable

III.A.2.a. EXISTING COURSES

TRAINING ACTIVITY: MTU-4035 NAMTRAU
LOCATION, UIC: NAS Whidbey Island, 66058
CIN, COURSE TITLE: E-646-7007, General Shipboard/NAS Weapons Department AVORD Maintenance
SOURCE: NAVY STUDENT CATEGORY: ACDU-TAR

CY00		FY01		FY02		FY03		FY04		
OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	
0	45.0	0	45.0	0	45.0	0	45.0	0	45.0	ATIR ⁶
0	40.5	0	40.5	0	40.5	0	40.5	0	40.5	Output
0	5.2	0	5.2	0	5.2	0	5.2	0	5.2	AOB
0	5.2	0	5.2	0	5.2	0	5.2	0	5.2	Chargeable

PART IV - TRAINING LOGISTICS SUPPORT REQUIREMENTS

The following elements are not affected by the AIM-9X and, therefore, are not included in this NTSP.

IV.C. Facility Requirements

IV.A. TRAINING HARDWARE

IV.A.1. TTE/GPTE/SPTE/ST/GPETE/SPETE

TRAINING ACTIVITY: NATTC, AO "A" School
LOCATION, UIC: NAS Pensacola, 63082
CIN, COURSE TITLE: C-646-2011A, Aviation Ordnanceman Common Core Class A1
C-646-2012A, Aviation Ordnanceman Navy Difference Training Strand Class A1

ITEM NUMBER	EQUIPMENT	TYPE OR RANGE OF REPAIR PARTS	QUANT REQD	DATE REQD	GFE CFE	STATUS
TTE						
001	CNU-609/E	TBD	1	FY03	GFE	On Contract ⁷
002	LAU-7D/A	NA	1	FY03	GFE	Pending ECP
003	AN/AWM-100 P/N 74D750051-1007	NA	1	FY03	GFE	Pending ECP

TRAINING ACTIVITY: MTU-4030 NAMTRAGRUDET
LOCATION, UIC: NS Mayport, 66069
CIN, COURSE TITLE: C-122-3111, Air Launched Guided Missile Intermediate Maintenance

ITEM NUMBER	EQUIPMENT	TYPE OR RANGE OF REPAIR PARTS	QUANT REQD	DATE REQD	GFE CFE	STATUS
TTE						
001	CNU-609/E	TBD	1	FY03	GFE	On Contract ⁷
005	AIM-9X CMBRE TPS P/N 15090 2215702-1	TBD	2	FY03	GFE	On Contract ⁷
N88-NTSP-A- 50-9104-TTE- 002	AN/GYQ-79	NA	2	FY03	GFE	On Contract
N88-NTSP-A- 50-9104-TTE- 003	Pacific™ 315-ASX	NA	2	FY03	GFE	On Contract

⁷ Dependent upon exercise of LRIP options and award of Production Contract.

IV.A.1. TTE/GPTE/SPTE/ST/GPETE/SPETE

TRAINING ACTIVITY: MTU-4032 NAMTRAGRUDET
LOCATION, UIC: NAS Norfolk, 66046
CIN, COURSE TITLE: C-122-3111, Air Launched Guided Missile Intermediate Maintenance
C-122-3118, Strike Armament Systems Intermediate Maintenance

ITEM NUMBER	EQUIPMENT	TYPE OR RANGE OF REPAIR PARTS	QUANT REQD	DATE REQD	GFE CFE	STATUS
TTE						
001	CNU-609/E	TBD	1	FY03	GFE	On Contract ⁷
002	LAU-7D/A	NA	1	FY03	GFE	Pending ECP
003	AN/AWM-100 P/N 74D750051-1007	NA	1	FY03	GFE	Pending ECP
004	CRALTS (LAU-7D/A compatible)	NA	3	FY03	GFE	Pending ECP
005	AIM-9X CMBRE TPS P/N 15090 2215702-1	TBD	2	FY03	GFE	On Contract ⁷
N88-NTSP-A- 50-9104-TTE- 002	AN/GYQ-79	NA	2	FY03	GFE	1 On Hand
N88-NTSP-A- 50-9104-TTE- 003	Pacific™ 315-ASX	NA	2	FY03	GFE	1 On Hand

TRAINING ACTIVITY: MTU-4033 NAMTRAGRUDET
LOCATION, UIC: NAS North Island, 66065
CIN, COURSE TITLE: C-122-3111, Air Launched Guided Missile Intermediate Maintenance
C-122-3118, Strike Armament Systems Intermediate Maintenance

ITEM NUMBER	EQUIPMENT	TYPE OR RANGE OF REPAIR PARTS	QUANT REQD	DATE REQD	GFE CFE	STATUS
TTE						
001	CNU-609/E	TBD	1	FY03	GFE	On Contract ⁷
002	LAU-7D/A	NA	1	FY03	GFE	Pending ECP
003	AN/AWM-100 P/N 74D750051-1007	NA	1	FY03	GFE	Pending ECP
004	CRALTS (LAU-7D/A compatible)	NA	3	FY03	GFE	Pending ECP
005	AIM-9X CMBRE TPS P/N 15090 2215702-1	TBD	2	FY03	GFE	On Contract ⁷
N88-NTSP-A- 50-9104-TTE- 002	AN/GYQ-79	NA	2	FY03	GFE	1 On Hand
N88-NTSP-A- 50-9104-TTE- 003	Pacific™ 315-ASX	NA	2	FY03	GFE	1 On Hand

IV.A.1. TTE/GPTE/SPTE/ST/GPETE/SPETE

TRAINING ACTIVITY: MTU-4034 VMAT-203 FREST
LOCATION, UIC: MCAS Cherry Point, 66047
CIN, COURSE TITLE: C-646-3105, Aviation Ordnance Intermediate Maintenance Technician

ITEM NUMBER	EQUIPMENT	TYPE OR RANGE OF REPAIR PARTS	QUANT REQD	DATE REQD	GFE CFE	STATUS
TTE						
001	CNU-609/E	TBD	1	FY03	GFE	On Contract ⁷
002	LAU-7D/A	NA	1	FY03	GFE	Pending ECP
003	AN/AWM-100 P/N 74D750051-1007	NA	1	FY03	GFE	Pending ECP
004	CRALTS (LAU-7D/A compatible)	NA	3	FY03	GFE	Pending ECP
005	AIM-9X CMBRE TPS P/N 15090 2215702-1	TBD	2	FY03	GFE	On Contract ⁷
N88-NTSP-A- 50-9104-TTE- 002	AN/GYQ-79	NA	2	FY03	GFE	1 On Hand
N88-NTSP-A- 50-9104-TTE- 003	Pacific™ 315-ASX	NA	2	FY03	GFE	1 On Hand

TRAINING ACTIVITY: MTU-4035 NAMTRAGRUDET
LOCATION, UIC: NAS Whidbey Island, 66058
CIN, COURSE TITLE: C-122-3111, Air Launched Guided Missile Intermediate Maintenance

ITEM NUMBER	EQUIPMENT	TYPE OR RANGE OF REPAIR PARTS	QUANT REQD	DATE REQD	GFE CFE	STATUS
TTE						
001	CNU-609/E	TBD	1	FY03	GFE	On Contract ⁷
005	AIM-9X CMBRE TPS P/N 15090 2215702-1	TBD	2	FY03	GFE	On Contract ⁷
N88-NTSP-A- 50-9104-TTE- 002	AN/GYQ-79	NA	2	FY03	GFE	1 On Hand
N88-NTSP-A- 50-9104-TTE- 003	Pacific™ 315-ASX	NA	2	FY03	GFE	1 On Hand

IV.A.2. TRAINING DEVICES

DEVICE: Captive Air Training Missile, CATM-9X

DESCRIPTION OF DEVICE: The CATM is a captive flight training missile permitting realistic exercise of the AIM-9X seeker. Airborne operation of the CATM provides the operator all interaction between aircraft and missile without expending the missile.

MANUFACTURER: RMS (contingent upon exercise of LRIP options Lots I, II, and III and additional Full-rate Production contract award)

CONTRACT NUMBER: N00019-97-C-0027 (contingent upon exercise of LRIP options Lots I, II, and III and additional Full-rate Production contract award)

TEE STATUS: NA

TRAINING ACTIVITY LOCATION, UIC	QUANT REQD	DATE REQD	RFT DATE	STATUS	COURSES SUPPORTED
VFA-106 NAS Oceana, 09679	28	FY02	FY03	On contract ⁷	D-2A-0601 D-2A-0602 D-2A-0604 D-2A-0606
VFA-125 NAS Lemoore, 09485	28	FY02	FY03	On contract ⁷	E-2A-0601 E-2A-0602 E-2A-0604 E-2A-0606
VMFAT-101 MCAS Miramar, 09965	28	FY02	FY03	On contract ⁷	M13P4B3 M13P3V3 M13P3W3 M13P4C3 M13P3R3 M13P3S3
SFWS Atlantic NAS Oceana, 40784	14	FY02	FY03	On contract ⁷	SFARP SFWE D-646-0640 D-646-0647
SFWS Pacific NAS Lemoore, 35185	14	FY02	FY03	On contract ⁷	SFARP SFWE E-646-0640 E-646-0647
Naval Strike and Air Warfare Center N7 (Topgun) NAS Fallon, 69190	14	FY02	FY03	On contract ⁷	SFTP SFTI
MAWTS 1, MCAS Yuma, 55167	14	FY02	FY03	On contract ⁷	ACTI/ACMI/ DEFTACI/WTI
VFA-22, NAS Lemoore, 09561	14	FY03	FY03	On contract ⁷	T&R/SFTP
VFA-25, NAS Lemoore, 09637	14	FY03	FY03	On contract ⁷	T&R/SFTP
VFA-94, NAS Lemoore, 09295	14	FY03	FY03	On contract ⁷	T&R/SFTP
VFA-97, NAS Lemoore, 63923	14	FY03	FY03	On contract ⁷	T&R/SFTP
VFA-113, NAS Lemoore, 09092	14	FY03	FY03	On contract ⁷	T&R/SFTP
VFA-115, NAS Lemoore, 09604	14	FY03	FY03	On contract ⁷	T&R/SFTP
VFA-137, NAS Lemoore, 55142	14	FY03	FY03	On contract ⁷	T&R/SFTP

IV.A.2. TRAINING DEVICES

DEVICE: Captive Air Training Missile, CATM-9X

DESCRIPTION OF DEVICE: The CATM is a captive flight training missile permitting realistic exercise of the AIM-9X seeker. Airborne operation of the CATM provides the operator all interaction between aircraft and missile without expending the missile.

MANUFACTURER: RMS (contingent upon exercise of LRIP options Lots I, II, and III and additional Full-rate Production contract award)

CONTRACT NUMBER: N00019-97-C-0027 (contingent upon exercise of LRIP options Lots I, II, and III and additional Full-rate Production contract award)

TEE STATUS: NA

TRAINING ACTIVITY LOCATION, UIC	QUANT REQD	DATE REQD	RFT DATE	STATUS	COURSES SUPPORTED
VFA-146, NAS Lemoore, 09063	14	FY03	FY03	On contract ⁷	T&R/SFTP
VFA-147, NAS Lemoore, 63925	14	FY03	FY03	On contract ⁷	T&R/SFTP
VFA-151, NAS Lemoore, 09558	14	FY03	FY03	On contract ⁷	T&R/SFTP
VFA-27, NAS Yokosuka, 65185	14	FY03	FY03	On contract ⁷	T&R/SFTP
VFA-154, NAS Yokosuka, 09678	14	FY03	FY03	On contract ⁷	T&R/SFTP
VFA-192, NAS Yokosuka, 55179	14	FY03	FY03	On contract ⁷	T&R/SFTP
VFA-195, NAS Yokosuka, 09706	14	FY03	FY03	On contract ⁷	T&R/SFTP
VFA-127, NAS Fallon, 08956	14	FY03	FY03	On contract ⁷	T&R/SFTP
VFC-13 (TAR), NAS Fallon, 52995	14	FY03	FY03	On contract ⁷	T&R/SFTP
VFA-15, MCAS Beaufort, 09015	14	FY03	FY03	On contract ⁷	T&R/SFTP
VFA-34, NAS Oceana, 09070	14	FY03	FY03	On contract ⁷	T&R/SFTP
VFA-37, NAS Oceana, 09478	14	FY03	FY03	On contract ⁷	T&R/SFTP
VFA-81, NAS Oceana, 09221	14	FY03	FY03	On contract ⁷	T&R/SFTP
VFA-82, NAS Oceana, 09122	14	FY03	FY03	On contract ⁷	T&R/SFTP
VFA-83, NAS Oceana, 09223	14	FY03	FY03	On contract ⁷	T&R/SFTP
VFA-86, NAS Oceana, 09943	14	FY03	FY03	On contract ⁷	T&R/SFTP
VFA-87, MCAS Beaufort, 63922	14	FY03	FY03	On contract ⁷	T&R/SFTP
VFA-105, NAS Oceana, 65183	14	FY03	FY03	On contract ⁷	T&R/SFTP
VFA-131, NAS Oceana, 63934	14	FY03	FY03	On contract ⁷	T&R/SFTP
VFA-136, NAS Oceana, 55141	14	FY03	FY03	On contract ⁷	T&R/SFTP
VFC-12 (TAR), NAS Oceana, 52994	14	FY03	FY03	On contract ⁷	T&R/SFTP
VFA-203 (TAR), NAS Atlanta, 09030	14	FY03	FY03	On contract ⁷	T&R/SFTP
VFA-204 (TAR), NAS Joint Reserve Base (JRB) New Orleans, 09032	14	FY03	FY03	On contract ⁷	T&R/SFTP
VX-1, NAS Patuxent River, 55600	14	FY02	FY03	On contract ⁷	T&R/SFTP
VX-9, NAWCWD China Lake, 55646	14	FY02	FY03	On contract ⁷	T&R/SFTP
VX-9 Det, NAWCWD Point Mugu, 09830	14	FY02	FY03	On contract ⁷	T&R/SFTP
NAVWPNTSTRON China Lake, 39787	14	FY02	FY03	On contract ⁷	T&R/SFTP
NAVWPNTSTRON Point Mugu, 39788	14	FY02	FY03	On contract ⁷	T&R/SFTP

IV.A.2. TRAINING DEVICES

DEVICE: Captive Air Training Missile, CATM-9X

DESCRIPTION OF DEVICE: The CATM is a captive flight training missile permitting realistic exercise of the AIM-9X seeker. Airborne operation of the CATM provides the operator all interaction between aircraft and missile without expending the missile.

MANUFACTURER: RMS (contingent upon exercise of LRIP options Lots I, II, and III and additional Full-rate Production contract award)

CONTRACT NUMBER: N00019-97-C-0027 (contingent upon exercise of LRIP options Lots I, II, and III and additional Full-rate Production contract award)

TEE STATUS: NA

TRAINING ACTIVITY LOCATION, UIC	QUANT REQD	DATE REQD	RFT DATE	STATUS	COURSES SUPPORTED
NAVSTKAIRTESTRON, NAS Patuxent River, 39783	14	FY02	FY03	On contract ⁷	T&R/SFTP
VMFA-115, MCAS Beaufort, 09234	14	FY03	FY03	On contract ⁷	T&R
VMFA-122, MCAS Beaufort, 09407	14	FY03	FY03	On contract ⁷	T&R
VMFA-251, MCAS Beaufort, 09241	14	FY03	FY03	On contract ⁷	T&R
VMFA-312, MCAS Beaufort, 09253	14	FY03	FY03	On contract ⁷	T&R
VMFAAW-224, MCAS Beaufort, 01224	14	FY03	FY03	On contract ⁷	T&R
VMFAAW-332, MCAS Beaufort, 09501	14	FY03	FY03	On contract ⁷	T&R
VMFAAW-533, MCAS Beaufort, 09193	14	FY03	FY03	On contract ⁷	T&R
VMFA-212, MCAS Miramar, 09434	14	FY03	FY03	On contract ⁷	T&R
VMFA-232, MCAS Miramar, 09242	14	FY03	FY03	On contract ⁷	T&R
VMFA-235, , MCAS Miramar, 09237	14	FY03	FY03	On contract ⁷	T&R
VMFA-314, MCAS Miramar, 09230	14	FY03	FY03	On contract ⁷	T&R
VMFA-323, MCAS Miramar, 09235	14	FY03	FY03	On contract ⁷	T&R
VMFAAW-121, MCAS Miramar,	14	FY03	FY03	On contract ⁷	T&R
VMFAAW-225, MCAS Miramar, 09232	14	FY03	FY03	On contract ⁷	T&R
VMFA-112 (AR), 08954	14	FY03	FY03	On contract ⁷	T&R
VMFA-134 (AR), 09365	14	FY03	FY03	On contract ⁷	T&R
VMFA-142 (AR), 67243	14	FY03	FY03	On contract ⁷	T&R
VMFA-321 (AR), 67235	14	FY03	FY03	On contract ⁷	T&R
TOTAL: (86% Asset Readiness)	896				

IV.A.2. TRAINING DEVICES

DEVICE: Dummy Air Training Missile, DATM-9X

DESCRIPTION OF DEVICE: The DATM is physically representative of the AIM-9X. It is a training device to facilitate instruction and familiarization for transporting, handling, loading, and visual inspection procedures for organizational- and intermediate-level training purposes. The DATM is not certified for flight, and is designed for ground training use only.

MANUFACTURER: RMS (contingent upon exercise of LRIP options Lots I, II, and III and additional Full-rate Production contract award)

CONTRACT NUMBER: N00019-97-C-0027 (contingent upon exercise of LRIP options Lots I, II, and III and additional Full-rate Production contract award)

TEE STATUS: NA

TRAINING ACTIVITY LOCATION, UIC	QUANT REQD	DATE REQD	RFT DATE	STATUS	COURSES SUPPORTED
MTU-4030, NAMTRAGRUDET NAS Mayport, 66069	2	FY02	FY03	On contract ⁷	C-122-3111
MTU-4032, NAMTRAGRUDET NAS Norfolk, 66046	2	FY02	FY03	On contract ⁷	C-122-3111
MTU-4033, NAMTRAGRUDET NAS North Island, 66065	2	FY02	FY03	On contract ⁷	C-122-3111
MTU-4034, VMAT-203, FREST MCAS Cherry Point, 45483	2	FY02	FY03	On contract ⁷	C-646-3105
MTU-4035, NAMTRAGRUDET NAS Whidbey Island, 66058	2	FY02	FY03	On contract ⁷	C-122-3111
NATTC, AO A1 School NAS Pensacola, 63082	2	FY02	FY03	On contract ⁷	C-646-2011A C-646-2012A
NAF Washington Andrews AFB, Maryland, 00166	2	FY03	FY03	On contract ⁷	F/A-18 Conventional Weapons Loading
NAS Atlanta Marietta, Georgia, 00196	2	FY03	FY03	On contract ⁷	F/A-18 Conventional Weapons Loading
NAS/JRB New Orleans New Orleans, Louisiana, 00206	2	FY03	FY03	On contract ⁷	F/A-18 Conventional Weapons Loading
NAS/JRB Fort Worth Fort Worth, Texas, 00215	2	FY03	FY03	On contract ⁷	F/A-18 Conventional Weapons Loading
TOTAL:	20				

IV.A.2. TRAINING DEVICES

DEVICE: Practical Explosive Ordnance Disposal System Trainer (PEST)

DESCRIPTION OF DEVICE: The AIM-9X PEST is a full scale model fabricated from actual hardware, having approximately the same weight and center of gravity as the tactical missile. The PEST is used for teaching and practicing Rendering Safe Procedures.

MANUFACTURER: RMS (contingent upon exercise of LRIP option Lot I)

CONTRACT NUMBER: N00019-97-C-0027 (contingent upon exercise of LRIP option Lot I)

TEE STATUS: NA

TRAINING ACTIVITY LOCATION, UIC	QUANT REQD	DATE REQD	RFT DATE	STATUS	COURSES SUPPORTED
NAVSCOLEOD Eglin AFB, 62640	4	FY02	FY03	On contract ⁷	A-431-0011 A-431-0012
EODTEU ONE San Diego, 30202	1	FY02	FY03	On contract ⁷	G-431-0001
EODTEU TWO Fort Story, 43505	1	FY02	FY03	On contract ⁷	G-431-0001

DEVICE: Classroom Explosive Ordnance Disposal System Trainer (CEST)

DESCRIPTION OF DEVICE: The AIM-9X CEST is a full-scale, inert replica of the tactical AIM-9X with cut-away areas exposing the explosive train components. EOD instructors use the CEST to teach EOD personnel missile Rendering Safe Procedures.

MANUFACTURER: RMS (contingent upon exercise of LRIP option Lot I)

CONTRACT NUMBER: N00019-97-C-0027 (contingent upon exercise of LRIP option Lot I)

TEE STATUS: NA

TRAINING ACTIVITY LOCATION, UIC	QUANT REQD	DATE REQD	RFT DATE	STATUS	COURSES SUPPORTED
NAVSCOLEOD Eglin AFB, 62640	1	FY02	FY03	On contract ⁷	A-431-0011 A-431-0012

IV.B. COURSEWARE REQUIREMENTS

IV.B.1 TRAINING SERVICES

COURSE/TYPE OF TRAINING	SCHOOL/LOCATION/UIC	NO. OF PERSONNEL	MAN WEEKS REQUIRED	BEGIN DATE
AIM-9X Aircrew Familiarization/ Initial (Instructor)	SFWSP/NAS Lemoore/35185	2	0.4	FY03
	VFA-125/NAS Lemoore/09485	2	0.4	FY03
	SFWSP/NAS Oceana/47084	2	0.4	FY03
	VFA-106/NAS Oceana/09679	2	0.4	FY03
AIM-9X Organizational Maintenance for the F/A-18C/D/ Initial (Instructor)	SFWSP/NAS Lemoore/35185	2	0.4	FY03
	SFWSP/NAS Oceana/47084	2	0.4	FY03
	AO A1/NAS Pensacola/63082	2	0.4	FY03
AIM-9X Intermediate Maintenance/ Initial (Instructor)	MTU 4030/NS Mayport/66069	2	0.8	FY03
	MTU 4032/NAS Norfolk/66046	2	0.8	FY03
	MTU 4033/NAS North Island/66065	2	0.8	FY03
	MTU 4034 VMAT 203 FREST/ MCAS Cherry Point/45483	2	0.8	FY03
	MTU 4035/NAS Whidbey Island/ 66065	2	0.8	FY03
	AO A1/NAS Pensacola/63082	2	0.8	FY03

IV.B.2. CURRICULA MATERIALS AND TRAINING AIDS

TRAINING ACTIVITY: VFA-106 LOCATION, UIC: NAS Oceana, 09679 CIN, COURSE TITLE: D-2A-0601, F/A-18 Fleet Replacement Pilot Cat 1 D-2A-0602, F/A-18 Fleet Replacement Pilot Cat 2A D-2A-0604, F/A-18 Fleet Replacement Pilot Cat 3A D-2A-0606, F/A-18 Fleet Replacement Pilot Cat 4			
TYPE OF MATERIAL OR AID	QUANT REQD	DATE REQD	STATUS
SFTS AIM-9X ICW	1 Set	FY03	In Development
TRAINING ACTIVITY: VFA-125 LOCATION, UIC: NAS Lemoore, 09485 CIN, COURSE TITLE: E-2A-0601, F/A-18 Fleet Replacement Pilot Cat 1 E-2A-0602, F/A-18 Fleet Replacement Pilot Cat 2A E-2A-0604, F/A-18 Fleet Replacement Pilot Cat 3A E-2A-0606, F/A-18 Fleet Replacement Pilot Cat 4			
TYPE OF MATERIAL OR AID	QUANT REQD	DATE REQD	STATUS
SFTS AIM-9X ICW	1 Set	FY03	In Development
TRAINING ACTIVITY: VMFAT-101 LOCATION, UIC: MCAS Miramar, 45526 CIN, COURSE TITLE: M13P4B3, F/A-18 Fleet Replacement Pilot Basic and Transition M13P3V3, F/A-18 Fleet Replacement Pilot Refresher M13P3W3, F/A-18 Fleet Replacement Pilot Modified Refresher M13P4C3, F/A-18 WSO Basic and Transition M13P3R3, F/A-18 WSO Refresher M13P3S3, F/A-18 WSO Modified Refresher			
TYPE OF MATERIAL OR AID	QUANT REQD	DATE REQD	STATUS
SFTS AIM-9X ICW	1 Set	FY03	In Development
TRAINING ACTIVITY: Strike Fighter Weapons School Atlantic LOCATION, UIC: NAS Oceana, 40784 CIN, COURSE TITLE: Strike Fighter Advanced Readiness Program (SFARP) Strike Fighter Weapons Employment (SFWE)			
TYPE OF MATERIAL OR AID	QUANT REQD	DATE REQD	STATUS
SFTS AIM-9X ICW	1 Set	FY03	In Development
TRAINING ACTIVITY: Strike Fighter Weapons School Pacific LOCATION, UIC: NAS Lemoore, 35185 CIN, COURSE TITLE: Strike Fighter Advanced Readiness Program (SFARP) Strike Fighter Weapons Employment (SFWE)			
TYPE OF MATERIAL OR AID	QUANT REQD	DATE REQD	STATUS
SFTS AIM-9X ICW	1 Set	FY03	In Development

IV.B.2. CURRICULA MATERIALS AND TRAINING AIDS

TRAINING ACTIVITY: Naval Strike and Air Warfare Center N7 (Topgun)
LOCATION, UIC: NAS Fallon, 69190
CIN, COURSE TITLE: Strike Fighter Training Program (SFTP)
Strike Fighter Tactics Instructor (SFTI)
Strike Fighter Weapons and Tactics (SFWT)

TYPE OF MATERIAL OR AID	QUANT REQD	DATE REQD	STATUS
SFTS AIM-9X ICW	1 Set	FY03	In Development

TRAINING ACTIVITY: MAWTS 1
LOCATION, UIC: MCAS Yuma, 55167
CIN, COURSE TITLE: Air Combat Maneuvering Instructor (ACMI)
Air Combat Tactics Instructor (ACTI)
Defensive Tactics Instructor (DEFTACI)
Weapons and Tactics Instructor (WTI)

TYPE OF MATERIAL OR AID	QUANT REQD	DATE REQD	STATUS
SFTS AIM-9X ICW	1 Set	FY03	In Development

TRAINING ACTIVITY: F/A-18 Squadrons
LOCATION, UIC: See Below

CIN, COURSE TITLE: SFTP and Training & Readiness (T&R)

TYPES OF MATERIAL OR AID:	QUANT REQD	DATE REQD	STATUS
SFTS AIM-9X ICW	1 Set	FY03	In Development
VFA-22, NAS Lemoore, 09561	1 Set	FY03	In Development
VFA-25, NAS Lemoore, 09637	1 Set	FY03	In Development
VFA-94, NAS Lemoore, 09295	1 Set	FY03	In Development
VFA-97, NAS Lemoore, 63923	1 Set	FY03	In Development
VFA-113, NAS Lemoore, 09092	1 Set	FY03	In Development
VFA-115, NAS Lemoore, 09604	1 Set	FY03	In Development
VFA-137, NAS Lemoore, 55142	1 Set	FY03	In Development
VFA-146, NAS Lemoore, 09063	1 Set	FY03	In Development
VFA-147, NAS Lemoore, 63925	1 Set	FY03	In Development
VFA-151, NAS Lemoore, 09558	1 Set	FY03	In Development
VFA-27, NAS Yokosuka, 65185	1 Set	FY03	In Development
VFA-154, NAS Yokosuka, 09678	1 Set	FY03	In Development
VFA-192, NAS Yokosuka, 55179	1 Set	FY03	In Development
VFA-195, NAS Yokosuka, 09706	1 Set	FY03	In Development
VFA-127, NAS Fallon, 08956	1 Set	FY03	In Development
VFC-13 (TAR), NAS Fallon, 52995	1 Set	FY03	In Development
VFA-15, MCAS Beaufort, 09015	1 Set	FY03	In Development
VFA-34, NAS Oceana, 09070	1 Set	FY03	In Development
VFA-37, NAS Oceana, 09478	1 Set	FY03	In Development
VFA-81, NAS Oceana, 09221	1 Set	FY03	In Development

IV.B.2. CURRICULA MATERIALS AND TRAINING AIDS

TRAINING ACTIVITY: F/A-18 Squadrons

LOCATION, UIC: See Below

CIN, COURSE TITLE: SFTP and Training & Readiness (T&R)

TYPES OF MATERIAL OR AID:	QUANT REQD	DATE REQD	STATUS
SFTS AIM-9X ICW			
VFA-82, NAS Oceana, 09122	1 Set	FY03	In Development
VFA-83, NAS Oceana, 09223	1 Set	FY03	In Development
VFA-86, NAS Oceana, 09943	1 Set	FY03	In Development
VFA-87, MCAS Beaufort, 63922	1 Set	FY03	In Development
VFA-105, NAS Oceana, 65183	1 Set	FY03	In Development
VFA-131, NAS Oceana, 63934	1 Set	FY03	In Development
VFA-136, NAS Oceana, 55141	1 Set	FY03	In Development
VFC-12 (TAR), NAS Oceana, 52994	1 Set	FY03	In Development
VFA-203 (TAR), NAS Atlanta, 09030	1 Set	FY03	In Development
VFA-204 (TAR), NAS JRB New Orleans, 09032	1 Set	FY03	In Development
VX-1, NAS Patuxent River, 55600	1 Set	FY03	In Development
VX-9, NAWCWD China Lake, 55646	1 Set	FY03	In Development
VX-9 Det, NAWCWD Point Mugu, 09830	1 Set	FY03	In Development

TRAINING ACTIVITY: F/A-18 Squadrons

LOCATION, UIC: See Below

CIN, COURSE TITLE: Squadron Training (T&R)

TYPES OF MATERIAL OR AID:	QUANT REQD	DATE REQD	STATUS
SFTS AIM-9X ICW			
VMFA-115, MCAS Beaufort, 09234	1 Set	FY03	In Development
VMFA-122, MCAS Beaufort, 09407	1 Set	FY03	In Development
VMFA-251, MCAS Beaufort, 09241	1 Set	FY03	In Development
VMFA-312, MCAS Beaufort, 09253	1 Set	FY03	In Development
VMFAAW-224, MCAS Beaufort, 01224	1 Set	FY03	In Development
VMFAAW-332, MCAS Beaufort, 09501	1 Set	FY03	In Development
VMFAAW-533, MCAS Beaufort, 09193	1 Set	FY03	In Development
VMFA-212, MCAS Miramar, 09434	1 Set	FY03	In Development
VMFA-232, MCAS Miramar, 09242	1 Set	FY03	In Development
VMFA-235, , MCAS Miramar, 09237	1 Set	FY03	In Development
VMFA-314, MCAS Miramar, 09230	1 Set	FY03	In Development
VMFA-323, MCAS Miramar, 09235	1 Set	FY03	In Development
VMFAAW-121, MCAS Miramar,	1 Set	FY03	In Development
VMFAAW-225, MCAS Miramar, 09232	1 Set	FY03	In Development
VMFA-112 (AR), 08954	1 Set	FY03	In Development
VMFA-134 (AR), 09365	1 Set	FY03	In Development

IV.B.2. CURRICULA MATERIALS AND TRAINING AIDS

TRAINING ACTIVITY: F/A-18 Squadrons

LOCATION, UIC: See Below

CIN, COURSE TITLE: Squadron Training (T&R)

TYPES OF MATERIAL OR AID:	QUANT REQD	DATE REQD	STATUS
SFTS AIM-9X ICW	1 Set	FY03	In Development
VMFA-142 (AR), 67243	1 Set	FY03	In Development

TRAINING ACTIVITY: NATTC, AO "A" School
LOCATION, UIC: NAS Pensacola, 63082
CIN, COURSE TITLE: C-646-2011A, Aviation Ordnance Common Core Class A1
 C-646-2012A, Aviation Ordnanceman Navy Difference Training Strand

TYPE OF MATERIAL OR AID	QUANT REQD	DATE REQD	STATUS
AIM-9X Training Package	1 Set ⁸	FY03	In Development

TRAINING ACTIVITY: SFWS Atlantic
LOCATION, UIC: NAS Oceana, 47084
CIN, COURSE TITLE: D-646-0640, F/A-18 Conventional Weapons Loading
 D-646-0647, F/A-18 Conventional Release System Test

TYPE OF MATERIAL OR AID	QUANT REQD	DATE REQD	STATUS
AIM-9X Training Package	1 Set ⁸	FY03	In Development

TRAINING ACTIVITY: SFWS Pacific
LOCATION, UIC: NAS Lemoore, 35185
CIN, COURSE TITLE: E-646-0640, F/A-18 Conventional Weapons Loading
 E-646-0647, F/A-18 Conventional Release System Test

TYPE OF MATERIAL OR AID	QUANT REQD	DATE REQD	STATUS
AIM-9X Training Package	1 Set ⁸	FY03	In Development

TRAINING ACTIVITY: MTU-4030 NAMTRAGRUDET
LOCATION, UIC: NS Mayport, 66069
CIN, COURSE TITLE: C-122-3111A, Air Launched Guided Missiles Intermediate Maintenance

TYPE OF MATERIAL OR AID	QUANT REQD	DATE REQD	STATUS
AIM-9X Training Package	1 Set ⁸	FY03	In Development
AIM-9X CMBRE Embedded Training PC Cards	1 Set	FY02	On Contract

⁸ Training package consists of Lesson Plan, Trainee Guide, Student Handbook, and Visual Aids.

N88-NTSP-A-50-9601A/P
August 2000

IV.B.2. CURRICULA MATERIALS AND TRAINING AIDS

TRAINING ACTIVITY: MTU-4032 NAMTRAGRUDET
LOCATION, UIC: NAS Norfolk, 66046
CIN, COURSE TITLE: C-122-3111A, Air Launched Guided Missiles Intermediate Maintenance
C-646-3118, Strike Armament Systems Intermediate Maintenance

TYPE OF MATERIAL OR AID	QUANT REQD	DATE REQD	STATUS
AIM-9X Training Package	1 Set ⁸	FY03	In Development
AIM-9X CMBRE Embedded Training PC Cards	1 Set	FY02	On Contract

TRAINING ACTIVITY: MTU-4033 NAMTRAGRUDET
LOCATION, UIC: NAS North Island, 66065
CIN, COURSE TITLE: C-122-3111A, Air Launched Guided Missiles Intermediate Maintenance
C-646-3118, Strike Armament Systems Intermediate Maintenance

TYPE OF MATERIAL OR AID	QUANT REQD	DATE REQD	STATUS
AIM-9X Training Package	1 Set ⁸	FY03	In Development
AIM-9X CMBRE Embedded Training PC Cards	1 Set	FY02	On Contract

TRAINING ACTIVITY: MTU-4034 VMAT-203 FREST
LOCATION, UIC: MCAS Cherry Point, 45483
CIN, COURSE TITLE: C-646-3105, Aviation Ordnance Intermediate Maintenance Technician

TYPE OF MATERIAL OR AID	QUANT REQD	DATE REQD	STATUS
AIM-9X Training Package	1 Set ⁸	FY03	In Development
AIM-9X CMBRE Embedded Training PC Cards	1 Set	FY02	On Contract

TRAINING ACTIVITY: MTU-4035 NAMTRAGRUDET
LOCATION, UIC: NAS Whidbey Island, 66058
CIN, COURSE TITLE: C-122-3111A, Air Launched Guided Missiles Intermediate Maintenance

TYPE OF MATERIAL OR AID	QUANT REQD	DATE REQD	STATUS
AIM-9X Training Package	1 Set ⁸	FY03	In Development
AIM-9X CMBRE Embedded Training PC Cards	1 Set	FY02	On Contract

TRAINING ACTIVITY: NAVSCOLEOD
LOCATION, UIC: Eglin AFB, 62640
CIN, COURSE TITLE: A-431-0011, EOD Phase II (Navy)
A-431-0012, EOD Phase II

TYPE OF MATERIAL OR AID	QUANT REQD	DATE REQD	STATUS
AIM-9X Source Data	1 Set	FY03	In Development

IV.B.2. CURRICULA MATERIALS AND TRAINING AIDS

TRAINING ACTIVITY: EODTEU ONE
LOCATION, UIC: San Diego, 30202
CIN, COURSE TITLE: G-431-0001, EOD Pre-deployment Team Training

TYPE OF MATERIAL OR AID	QUANT REQD	DATE REQD	STATUS
AIM-9X Source Data	1 Set	FY03	In Development

TRAINING ACTIVITY: EODTEU TWO
LOCATION, UIC: Fort Story, 43505
CIN, COURSE TITLE: G-431-0001, EOD Pre-deployment Team Training

TYPE OF MATERIAL OR AID	QUANT REQD	DATE REQD	STATUS
AIM-9X Source Data	1 Set	FY03	In Development

August 2000

IV.B.3. TECHNICAL MANUALS

TRAINING ACTIVITY: VFA-106
LOCATION, UIC: NAS Oceana, 09679
CIN, COURSE TITLE: D-2A-0601, F/A-18 Fleet Replacement Pilot Cat 1
 D-2A-0602, F/A-18 Fleet Replacement Pilot Cat 2A
 D-2A-0604, F/A-18 Fleet Replacement Pilot Cat 3A
 D-2A-0606, F/A-18 Fleet Replacement Pilot Cat 4

TECHNICAL MANUAL TITLE, NUMBER	MEDIUM	QUANT REQD	DATE REQD	STATUS
NATOPS Flight Manual Navy Model F/A-18A/B/C/D, A1-F18AC-NFM-000	Digital or Hard copy	6	FY03	Update in process
NATOPS Pocket Checklist, A1-F18AC-NFM-500	Digital or Hard copy	6	FY03	Update in process
Tactical Manual, A1-F18AC-TAC-000	Digital or Hard copy	6	FY03	Update in process
Tactical Manual Pocket Guide, A1-F18AC-TAC-300	Digital or Hard copy	6	FY03	Update in process

TRAINING ACTIVITY: VFA-125
LOCATION, UIC: NAS Lemoore, 09485
CIN, COURSE TITLE: E-2A-0601, F/A-18 Fleet Replacement Pilot Cat 1
 E-2A-0602, F/A-18 Fleet Replacement Pilot Cat 2A
 E-2A-0604, F/A-18 Fleet Replacement Pilot Cat 3A
 E-2A-0606, F/A-18 Fleet Replacement Pilot Cat 4

NATOPS Flight Manual Navy Model F/A-18A/B/C/D, A1-F18AC-NFM-000	Digital or Hard copy	6	FY03	Update in process
NATOPS Pocket Checklist, A1-F18AC-NFM-500	Digital or Hard copy	6	FY03	Update in process
Tactical Manual, A1-F18AC-TAC-000	Digital or Hard copy	6	FY03	Update in process
Tactical Manual Pocket Guide, A1-F18AC-TAC-300	Digital or Hard copy	6	FY03	Update in process

TRAINING ACTIVITY: SFWS Atlantic
LOCATION, UIC: NAS Oceana, 40784
CIN, COURSE TITLE: SFARP
 SFWE

TECHNICAL MANUAL TITLE, NUMBER	MEDIUM	QUANT REQD	DATE REQD	STATUS
NATOPS Flight Manual Navy Model F/A-18A/B/C/D, A1-F18AC-NFM-000	Digital or Hard copy	6	FY03	Update in process
NATOPS Pocket Checklist, A1-F18AC-NFM-500	Digital or Hard copy	6	FY03	Update in process
Tactical Manual, A1-F18AC-TAC-000	Digital or Hard copy	6	FY03	Update in process
Tactical Manual Pocket Guide, A1-F18AC-TAC-300	Digital or Hard copy	6	FY03	Update in process

August 2000

IV.B.3. TECHNICAL MANUALS

TRAINING ACTIVITY: SFWS Pacific
LOCATION, UIC: NAS Lemoore, 35185
CIN, COURSE TITLE: SFARP
 SFWE

TECHNICAL MANUAL TITLE, NUMBER	MEDIUM	QUANT REQD	DATE REQD	STATUS
NATOPS Flight Manual Navy Model F/A-18A/B/C/D, A1-F18AC-NFM-000	Digital or Hard copy	6	FY03	Update in process
NATOPS Pocket Checklist, A1-F18AC-NFM-500	Digital or Hard copy	6	FY03	Update in process
Tactical Manual, A1-F18AC-TAC-000	Digital or Hard copy	6	FY03	Update in process
Tactical Manual Pocket Guide, A1-F18AC-TAC-300	Digital or Hard copy	6	FY03	Update in process

TRAINING ACTIVITY: VMFAT-101
LOCATION, UIC: MCAS Miramar, 45526
CIN, COURSE TITLE: M13P4B3, F/A-18 Fleet Replacement Pilot Basic and Transition
 M13P3V3, F/A-18 Fleet Replacement Pilot Refresher
 M13P3W3, F/A-18 Fleet Replacement Pilot Modified Refresher
 M13P4C3, F/A-18 WSO Basic and Transition
 M13P3R3, F/A-18 WSO Refresher
 M13P3S3, F/A-18 WSO Modified Refresher

NATOPS Flight Manual Navy Model F/A-18A/B/C/D, A1-F18AC-NFM-000	Digital or Hard copy	6	FY03	Update in process
NATOPS Pocket Checklist, A1-F18AC-NFM-500	Digital or Hard copy	6	FY03	Update in process
Tactical Manual, A1-F18AC-TAC-000	Digital or Hard copy	6	FY03	Update in process
Tactical Manual Pocket Guide, A1-F18AC-TAC-300	Digital or Hard copy	6	FY03	Update in process

TRAINING ACTIVITY: MAWTS 1
LOCATION, UIC: MCAS Yuma, 55167
CIN, COURSE TITLE: Air Combat Maneuvering Instructor (ACMI)
 Air Combat Tactics Instructor (ACTI)
 Defensive Tactics Instructor (DEFTACI)
 Weapons and Tactics Instructor (WTI)

NATOPS Flight Manual Navy Model F/A-18A/B/C/D, A1-F18AC-NFM-000	Digital or Hard copy	6	FY03	Update in process
NATOPS Pocket Checklist, A1-F18AC-NFM-500	Digital or Hard copy	6	FY03	Update in process
Tactical Manual, A1-F18AC-TAC-000	Digital or Hard copy	6	FY03	Update in process
Tactical Manual Pocket Guide, A1-F18AC-TAC-300	Digital or Hard copy	6	FY03	Update in process

August 2000

IV.B.3. TECHNICAL MANUALS

TRAINING ACTIVITY: SFWS Atlantic
LOCATION, UIC: NAS Oceana, 47084
CIN, COURSE TITLE: D-646-0640, F/A-18 Conventional Weapons Loading
 D-646-0647, F/A-18 Conventional Release System Test

TECHNICAL MANUAL TITLE, NUMBER	MEDIUM	QUANT REQD	DATE REQD	STATUS
Airborne Weapons/Stores Loading Manual, A1-F18AE-LWS-000	Hard copy	10	FY03	Update in process
Release & Control (Missiles), Air to Air A1-F18AE-LWS-210	Hard copy	10	FY03	Update in process
AIM-9/Sidewinder/TACTS/SAIP POD A1-F18AE-LWS-530	Hard copy	10	FY03	Update in process
Organizational and Intermediate Maintenance with Illustrated Parts Breakdown, Sidewinder Guided Missile AIM-9X and Training Missile, AIM-9X Test Program Set, and CNU-609/E Container NAVAIR 01-AIM9X-2	Hard copy	10	FY03	Development in process

TRAINING ACTIVITY: SFWS Pacific
LOCATION, UIC: NAS Lemoore, 35185
CIN, COURSE TITLE: E-646-0640, F/A-18 Conventional Weapons Loading
 E-646-0647, F/A-18 Conventional Release System Test

TECHNICAL MANUAL TITLE, NUMBER	MEDIUM	QUANT REQD	DATE REQD	STATUS
Airborne Weapons/Stores Loading Manual, A1-F18AE-LWS-000	Hard copy	10	FY03	Update in process
Release & Control (Missiles), Air to Air A1-F18AE-LWS-210	Hard copy	10	FY03	Update in process
AIM-9/Sidewinder/TACTS/SAIP POD A1-F18AE-LWS-530	Hard copy	10	FY03	Update in process
Organizational and Intermediate Maintenance with Illustrated Parts Breakdown, Sidewinder Guided Missile AIM-9X and Training Missile, AIM-9X Test Program Set, and CNU-609/E Container NAVAIR 01-AIM9X-2	Hard copy	10	FY03	Development in process

August 2000

IV.B.3. TECHNICAL MANUALS

TRAINING ACTIVITY: MTU-4030 NAMTRAGRUDET
LOCATION, UIC: NS Mayport, 66069
CIN, COURSE TITLE: C-122-3111A, Air Launched Guided Missiles Intermediate Maintenance

TECHNICAL MANUAL TITLE, NUMBER	MEDIUM	QUANT REQD	DATE REQD	STATUS
Organizational and Intermediate Maintenance with Illustrated Parts Breakdown, Sidewinder Guided Missile AIM-9X and Training Missile, AIM-9X Test Program Set, and CNU-609/E Container NAVAIR 01-AIM9X-2	Hard copy	13	FY03	Development in process
Airborne Weapons Packaging/Handling/ Stowage (Shipboard) Volume I, NAVAIR 11-120A-1.1	Hard copy	13	FY03	Update in process
Airborne Weapons Packaging/Handling/ Stowage (Shipboard) Volume II, NAVAIR 11-120A-1.2	Hard copy	13	FY03	Update in process
Guided Missile, AIM-9X Sidewinder, Ship Weapon Installation Manual, NAVAIR 11-120-84	Hard copy	13	FY03	Development in process
Airborne Weapons Handling Equipment (Shipboard), NAVAIR 19-100-2	Hard copy	13	FY03	Update in process
Airborne Weapons/Stores Checklist, Transporting and Loading Equipment Configuration (Shipboard), NAVAIR 19-95-1	Hard copy	13	FY03	Update in process
Airborne Weapons Assembly Manual Air Launched Guided Missiles and Selected Vehicles Volume I Air Intercept Missiles (Tactical) Organizational and Intermediate Activities, NA 11-140-6.1	Hard copy	13	FY03	Update in process

Note: Existing manuals currently reflect AIM-9M requirements only and will be updated with AIM-9X data as information becomes available.

August 2000

IV.B.3. TECHNICAL MANUALS

TRAINING ACTIVITY: MTU-4032 NAMTRAGRUDET
LOCATION, UIC: NAS Norfolk, 66046
CIN, COURSE TITLE: C-122-3111A, Air Launched Guided Missiles Intermediate Maintenance

TECHNICAL MANUAL TITLE, NUMBER	MEDIUM	QUANT REQD	DATE REQD	STATUS
Organizational and Intermediate Maintenance with Illustrated Parts Breakdown, Sidewinder Guided Missile AIM-9X and Training Missile, AIM-9X Test Program Set, and CNU-609/E Container NAVAIR 01-AIM9X-2	Hard copy	13	FY03	Development in process
Airborne Weapons Packaging/Handling/ Stowage (Shipboard) Volume I, NAVAIR 11-120A-1.1	Hard copy	13	FY03	Update in process
Airborne Weapons Packaging/Handling/ Stowage (Shipboard) Volume II, NAVAIR 11-120A-1.2	Hard copy	13	FY03	Update in process
Guided Missile, AIM-9X Sidewinder, Ship Weapon Installation Manual, NAVAIR 11-120-84	Hard copy	13	FY03	Development in process
Airborne Weapons Handling Equipment (Shipboard), NAVAIR 19-100-2	Hard copy	13	FY03	Update in process
Airborne Weapons/Stores Checklist, Transporting and Loading Equipment Configuration (Shipboard), NAVAIR 19-95-1	Hard copy	13	FY03	Update in process
Airborne Weapons Assembly Manual Air Launched Guided Missiles and Selected Vehicles Volume I Air Intercept Missiles (Tactical) Organizational and Intermediate Activities, NA 11-140-6.1	Hard copy	13	FY03	Update in process

Note: Existing manuals currently reflect AIM-9M requirements only and will be updated with AIM-9X data as information becomes available.

August 2000

IV.B.3. TECHNICAL MANUALS

TRAINING ACTIVITY: MTU-4033 NAMTRAGRUDET
LOCATION, UIC: NAS North Island, 66065
CIN, COURSE TITLE: C-122-3111A, Air Launched Guided Missiles Intermediate Maintenance

TECHNICAL MANUAL TITLE, NUMBER	MEDIUM	QUANT REQD	DATE REQD	STATUS
Organizational and Intermediate Maintenance with Illustrated Parts Breakdown, Sidewinder Guided Missile AIM-9X and Training Missile, AIM-9X Test Program Set, and CNU-609/E Container NAVAIR 01-AIM9X-2	Hard copy	13	FY03	Development in process
Airborne Weapons Packaging/Handling/ Stowage (Shipboard) Volume I, NAVAIR 11-120A-1.1	Hard copy	13	FY03	Update in process
Airborne Weapons Packaging/Handling/ Stowage (Shipboard) Volume II, NAVAIR 11-120A-1.2	Hard copy	13	FY03	Update in process
Guided Missile, AIM-9X Sidewinder, Ship Weapon Installation Manual, NAVAIR 11-120-84	Hard copy	13	FY03	Development in process
Airborne Weapons Handling Equipment (Shipboard), NAVAIR 19-100-2	Hard copy	13	FY03	Update in process
Airborne Weapons/Stores Checklist, Transporting and Loading Equipment Configuration (Shipboard), NAVAIR 19-95-1	Hard copy	13	FY03	Update in process
Airborne Weapons Assembly Manual Air Launched Guided Missiles and Selected Vehicles Volume I Air Intercept Missiles (Tactical) Organizational and Intermediate Activities, NA 11-140-6.1	Hard copy	13	FY03	Update in process

Note: Existing manuals currently reflect AIM-9M requirements only and will be updated with AIM-9X data as information becomes available.

TRAINING ACTIVITY: MTU-4034 VMAT-203 FREST
LOCATION, UIC: MCAS Cherry Point, 66047
CIN, COURSE TITLE: C-646-3105, Aviation Ordnance Intermediate Maintenance Technician

TECHNICAL MANUAL TITLE, NUMBER	MEDIUM	QUANT REQD	DATE REQD	STATUS
Organizational and Intermediate Maintenance with Illustrated Parts Breakdown, Sidewinder Guided Missile AIM-9X and Training Missile, AIM-9X Test Program Set, and CNU-609/E Container NAVAIR 01-AIM9X-2	Hard copy	13	FY03	Development in process
Airborne Weapons Assembly Manual Air Launched Guided Missiles and Selected Vehicles Volume I Air Intercept Missiles (Tactical) Organizational and Intermediate Activities, NA 11-140-6.1	Hard copy	13	FY03	Update in process

August 2000

IV.B.3. TECHNICAL MANUALS

TRAINING ACTIVITY: MTU-4035 NAMTRAGRUDET
LOCATION, UIC: NAS Whidbey Island, 66058
CIN, COURSE TITLE: C-122-3111A, Air Launched Guided Missiles Intermediate Maintenance

TECHNICAL MANUAL TITLE, NUMBER	MEDIUM	QUANT REQD	DATE REQD	STATUS
Organizational and Intermediate Maintenance with Illustrated Parts Breakdown, Sidewinder Guided Missile AIM-9X and Training Missile, AIM-9X Test Program Set, and CNU-609/E Container NAVAIR 01-AIM9X-2	Hard copy	13	FY03	Development in process
Airborne Weapons Packaging/Handling/ Stowage (Shipboard) Volume I, NAVAIR 11-120A-1.1	Hard copy	13	FY03	Update in process
Airborne Weapons Packaging/Handling/ Stowage (Shipboard) Volume II, NAVAIR 11-120A-1.2	Hard copy	13	FY03	Update in process
Guided Missile, AIM-9X Sidewinder, Ship Weapon Installation Manual, NAVAIR 11-120-84	Hard copy	13	FY03	Development in process
Airborne Weapons Handling Equipment (Shipboard), NAVAIR 19-100-2	Hard copy	13	FY03	Update in process
Airborne Weapons/Stores Checklist, Transporting and Loading Equipment Configuration (Shipboard), NAVAIR 19-95-1	Hard copy	13	FY03	Update in process
Airborne Weapons Assembly Manual Air Launched Guided Missiles and Selected Vehicles Volume I Air Intercept Missiles (Tactical) Organizational and Intermediate Activities, NA 11-140-6.1	Hard copy	13	FY03	Update in process

Note: Existing manuals currently reflect AIM-9M requirements only and will be updated with AIM-9X data as information becomes available.

TRAINING ACTIVITY: NAVSCOLEOD DET
LOCATION, UIC: Eglin AFB, 46207
CIN, COURSE TITLE: A-431-0011, EOD Phase II (Navy)
A-431-0012, EOD Phase II

TECHNICAL MANUAL TITLE, NUMBER	MEDIUM	QUANT REQD	DATE REQD	STATUS
Explosive Ordnance Disposal Book, EODB6OG-02-2-34-5	CD-ROM	150	FY03	In Development

TRAINING ACTIVITY: EODTEU ONE
LOCATION, UIC: NAS Barbers Point, 30202
CIN, COURSE TITLE: G-431-0001, EOD Pre-deployment Team Training

TECHNICAL MANUAL TITLE, NUMBER	MEDIUM	QUANT REQD	DATE REQD	STATUS
Explosive Ordnance Disposal Book, EODB6OG-02-2-34-5	CD-ROM	4	FY03	In Development

IV.B.3. TECHNICAL MANUALS

TRAINING ACTIVITY: EODTEU TWO
LOCATION, UIC: Fort Story, 43505
CIN, COURSE TITLE: G-431-0001, EOD Pre-deployment Team Training

TECHNICAL MANUAL TITLE, NUMBER	MEDIUM	QUANT REQD	DATE REQD	STATUS
Explosive Ordnance Disposal Book, EODB6OG-02-2-34-5	CD-ROM	4	FY03	In Development

PART V - MPT MILESTONES

COG CODE	MPT MILESTONES	DATE	STATUS
PMA 205	Commence analysis of manpower personnel and training requirements (HARDMAN)	May 93	Completed
PMA 205	Prepare Human Systems Integration Plan for AIM-9X	July 94	Completed
PMA 205	Promulgate Draft NTSP	Dec 96	Completed
AIR-3.1.1L	Promulgated Draft ILSP	July 97	Completed
PMA 205	Promulgate Approved NTSP	May 98	Completed
AIR-3.1.1L	Promulgated Approved ALSP	Jan 99	Completed
RMS	Provide DT-IIB/C Training	July 98	Completed
RMS	Provide OT-IIA Training	Sep 99	Completed
NAVWPNTSTRON	Commence TECHEVAL (DT-IID)	Nov 00	
RMS	Provide OT-IIB Training	Oct 01	
OPTEVFOR/VX-9	Commence OPEVAL (OT-IIB)	Nov 01	
PMA 205-3J/RMS	Begin Technical Training Equipment delivery	FY02	
PMA 205-3J/RMS	Training Device delivery	FY02	
PMA205-3J	Training Package Presented at MTRRs	FY02	
PMA 205-3J	Curricula material delivery	FY03	
AIR-3.1.1L/RMS	Technical Manuals delivery	FY03	
PMA 205-3J	Commence Initial Training	FY03	
AIR-3.1.1L	Material Support Date (MSD) attained	FY03	
PMA 259/AIR-3.1.1L	Fleet Introduction	FY03	
CNET/NSAWC/MCCDC	Commence Follow-on Training	FY03	
AIR-3.1.1L	Navy Support Date (NSD) attained	FY04	

PART VI - DECISION ITEMS/ACTION REQUIRED

DECISION ITEM OR ACTION REQUIRED	COMMAND ACTION	DUE DATE	STATUS
Waive requirement for MPT Advisory Board and incorporate HARDMAN analysis data directly into Preliminary Draft NTSP	OPNAV N889H	July 93	Closed - waiver granted
Identify squadron proficiency training requirements, e.g., CATM and ICW, in Preliminary Draft NTSP	PMA 205-5F	Dec 96	Closed – quantities and rationale included in NTSP
Coordinate/integrate development of AIM-9X aircrew training with JHMCS training to the fullest extent possible	PMA 205-3J	Feb 98	Closed – Joint Interface Control Working Group (JICWG) formed by PMA259
Track status of AIM-9X maintenance concept for switch to shipboard BIT and reprogramming of AIM-9X assets using CMBRE	PMA 205-3J	March 98	Closed – maintenance and training concept updated and resource requirements identified

PART VII - POINTS OF CONTACT

NAME / FUNCTION / ACTIVITY, CODE / INTERNET EMAIL	TELEPHONE NUMBERS
LCDR Robert Vance AIM-9X Resource Sponsor CNO, N880C7 robert.vance@hq.navy.mil	COMM: (703) 695-1841 DSN: 225-1841 FAX: (703) 693-8823
CAPT Owen Fletcher Deputy Head, Plans, Policy, and Fleet Maintenance Support CNO, N881B fletcher.owen@hq.navy.mil	COMM: (703) 604-7747 DSN: 664-7747 FAX: (703) 604-6972
MAJ David Stokes Aviation Ordnance Program Officer CNO, N881C8 stokes.david@hq.navy.mil	COMM: (703) 604-7773 DSN: 664-7773 FAX: (703) 604-6972
CAPT Thomas Vandenberg Head, Aviation Technical Training CNO, N889H vandenberg.thomas@hq.navy.mil	COMM: (703) 604-7730 DSN: 664-7730 FAX: (703) 604-6939
LCDR Michael Belcher NTSP Manager CNO, N889H1 belcher.michael@hq.navy.mil	COMM: (703) 604-7714 DSN: 664-7714 FAX: (703) 604-6939
Mr. Robert Zweibel Training Technology Policy CNO, N75B zweibel.robert@hq.navy.mil	COMM: (703) 614-1344 DSN: 224-1344 FAX: (703) 695-5698
CDR Kevin Neary Aviation Manpower CNO, N122C1 n122c1@bupers.navy.mil	COMM: (703) 695-3247 DSN: 225-3247 FAX: (703) 614-5308
LT Alan Nordholm Human Systems Integration Requirements, Aviation CNO, N125F n125f@bupers.navy.mil	COMM: (703) 614-6859 DSN: 224-6859 FAX: (703) 697-8684
CDR Rick Sadsad Aviation Mechanical, Enlisted Plans and Career Management Division, Community Manager CNO, N132D1 n132d1@bupers.navy.mil	COMM: (703) 695-3806 DSN: 225-3806 FAX: (703) 614-6502

PART VII - POINTS OF CONTACT

NAME / FUNCTION / ACTIVITY, CODE / INTERNET EMAIL	TELEPHONE NUMBERS
COL Dennis Bartels Branch head, USMC Aviation Manpower Management CMC, ASM-1 bartelsd@hqmc.usmc.mil	COMM: (703) 614-1244 DSN: 224-1244 FAX: (703) 614-1309
LCOL August Malsom Aviation Ordnance Officer CMC, ASL-30 malsonaf@hqmc.usmc.mil	COMM: (703) 614-1133 DSN: 224-1133 FAX: (703) 697-7343
CAPT David Venlet Air-to-Air Missile Program Manager NAVAIRSYSCOM, PMA 259 venletdj@navair.navy.mil	COMM: (301) 757-7311 DSN: 757-7311 FAX: (301) 757-7310
Col James McClendon Short Range Missile (AIM-9X) Deputy Program Manager NAVAIRSYSCOM PMA 259C mcclendonjr@navair.navy.mil	COMM: (301) 757-7313 DSN: 757-7313 FAX: (301) 757-7310
Mr. Richard Wilder AIM-9X Deputy of Fielding NAVAIRSYSCOM, PMA259C7 wilderrw@navair.navy.mil	COMM: (301) 757-7282 DSN: 757-7282 FAX: 301) 757-7487
Capt David Morgan AIM-9X System Validation Team Leader NAVAIRSYSCOM, PMA 259C6 morgandj2@navair.navy.mil	COMM: (301) 757-7303 DSN: 757-7303 FAX: (301) 757-7310
CDR Robert Finlayson F/A-18 Training System Program Manager NAVAIRSYSCOM, PMA 265/PMA205 finlaysonrk@navair.navy.mil	COMM: (301) 757-7651 DSN: 757-7651 FAX: (301) 757-6945
Mr. Tom Drobeck F/A-18 Assistant Program Manager Training Systems NAVAIRSYSCOM, PMA 205-1D1 drobeckt@navair.navy.mil	DSN: 757-8166 COMM: (301) 757-8166 FAX: (301) 757-6945
Mr. Bill Long Sidewinder Training System Program Manager NAVAIRSYSCOM, PMA 205-3J longwrf@navair.navy.mil	COMM: (301) 757-8104 DSN: 757-8104 FAX: (301) 757-6941
Ms. Brenda Walker AIM-9X Assistant Program Manager, Logistics NAVAIRSYSCOM, AIR-3.1.1L walkerbm@navair.navy.mil	COMM: (301) 757-7510 DSN: 757-7510 FAX: (301) 757-7487

PART VII - POINTS OF CONTACT

NAME / FUNCTION / ACTIVITY, CODE / INTERNET EMAIL	TELEPHONE NUMBERS
Mr. Bob Kresge NTSP Manager NAVAIRSYSCOM, AIR 3.4.1 kresgerj@navair.navy.mil	COMM: (301) 757-9174 DSN: 757-9174 FAX: (301) 342-4723
CDR Mark Converse AIM-9X Class Desk NAVAIRSYSCOM, AIR-4.7.1 converseme@navair.navy.mil	COMM: (301) 757-7290 DSN: 757-7290 FAX: (301) 757-7310
Mr. Brian Hall F/A-18 IPT Lead for AIM-9X and JHMCS Integration NAVAIRSYSCOM, AIR-4.1.2.1 hallbc@navair.navy.mil	COMM: (301) 757-6955 DSN: 757-6955 FAX: (301) 757-6995
CDR Robin Mason Aviation NTSP Point of Contact CINCLANTFLT, N-721 masonrf@clf.navy.mil	COMM: (757) 836-0101 DSN: 836-0101 FAX: (757) 836-0141
Mr. Bob Long Deputy Director for Training CINCPACFLT, N70 u70@cpf.navy.mil	COMM: (808) 471-8513 DSN: 471-8513 FAX: (808) 471-8596
CDR Dave Lepard Force Weapons Officer COMNAVAIRPAC, N85A lepard.david.h@cnap.navy.mil	COMM: (619) 545-2807 DSN: 735-2807 FAX: (619) 545-2774
LT Rick Miller Assistant Force Weapons Officer COMNAVAIRLANT, N85A millerjr@exchange.airlant.navy.mil	COMM: (757) 444-7481 DSN: 564-7481 FAX: (757) 444-7483
LCDR Kenneth Minnard Weapons Officer COMNAVAIRRESFOR, N3W airn3w@cnrf.nola.navy.mil	COMM: (504) 678-6846 DSN: 678-6846 FAX: (504) 678-1442
CAPT Patricia Huiatt Deputy Assistant, Chief of Naval Personnel for Distribution NAVPERSCOM, PERS-4B p4b@persnet.navy.mil	COMM: (901) 874-3529 DSN: 882-3529 FAX: (901) 874-2606
CDR Tim Ferree Branch Head, Aviation Ratings NAVPERSCOM, PERS-404 p404@persnet.navy.mil	COMM: (901) 874-3691 DSN: 882-3691 FAX: (901) 874-2642

PART VII - POINTS OF CONTACT

NAME / FUNCTION / ACTIVITY, CODE / INTERNET EMAIL

TELEPHONE NUMBERS

LT Mark Bailey

Aviation & Armament Rating Assignment Officer
NAVPERSCOM, PERS-404C
p404c@persnet.navy.mil

COMM: (901) 874-3657

DSN: 882-3657

FAX: (901) 874-2642

MAJ Jon Doering

Head, ACE Branch, TFS Division
MCCDC, C5325A
doeringjg@mccdc.usmc.mil

COMM: (703) 784-6241

DSN: 278-6241

FAX: (703) 784-6072

CDR Scott Gingery

Aviation Department Head
NAVMAC, 30
scott.gingery@navmac.navy.mil

COMM: (901) 874-6218

DSN: 882-6218

FAX: (901) 874-6471

Mr. Al Sargent

NTSP Coordinator
NAVMAC, 33
al.sargent@navmac.navy.mil

COMM: (901) 874-6247

DSN: 882-6247

FAX: (901) 874-6471

Mr. Steve Berk

NTSP Distribution
CNET, ETS23
stephen.berk@smtp.cnet.navy.mil

COMM: (850) 452-8919

DSN: 922-8919

FAX: (850) 452-4853

CDR Erich Blunt

Aviation Systems Program Manager
CNET, ETE32
cdr-erich.blunt@cnet.navy.mil

COMM: (850) 452-4915

DSN: 922-4915

FAX: (850) 452-4901

AOCM William Harrison

Air Launch Weapons Training Coordinator
NAMTRAGRU HQ, N2412
aocs-william.c.harrison@cnet.navy.mil

COMM: (850) 452-9708 ext 242

DSN: 922-9708ext 242

FAX: (850) 452-9769

Mr. Dennis Bobbitt

Data Manager (Technical Manuals)
NATEC, 331A14
bobbitt@d@natec.navy.mil

COMM: (619) 545-2425

DSN: 735-2425

FAX: (619) 545-1883

Ms. Connie Wells,

NAWCWD, CL311200D
Sidewinder Logistics Manager
wellscl@navair.navy.mil

COMM: (760) 939-8554

DSN: 437-8554

FAX: (760) 939-1015

LT Richard McCormack

AIM-9X Development Test Project Pilot
NAWCWD, CL47HR00D
mccormackrc@navair.navy.mil

COMM: (760) 939-8457

DSN: 437-8457

FAX: (760) 939-1015

PART VII - POINTS OF CONTACT

NAME / FUNCTION / ACTIVITY, CODE / INTERNET EMAIL

TELEPHONE NUMBERS

BMCM Vinnie Vargas

EOD Operations Officer
NAWCWD, CL8K0000D
vargasv@navair.navy.mil

COMM: (760) 939-6427

DSN: 437-6427

FAX: (760) 939-6367

MAJ John Spahr

Sidewinder Instructor/Subject Matter Expert
NSAWC (Topgun), N76
spahrj@nsawc.navy.smil.mil

COMM: (775) 426-3674

DSN: 890-3674

FAX: (775) 426-4510

MAJ Bill Lieblein

Air-to-Air Missile Instructor/Subject Matter Expert
MAWTS-1
liebleinwr@mawts1.usmc.mil

COMM: (520) 341-6025

DSN: 951-6025

FAX: (520) 341-2637

CDR Paul Pompier

Operational Test Coordinator, Air Weapons
COMOPTEVFOR, 51
pompierp@cotf.navy.mil

COMM: (757) 444-5546 ext 3244

DSN: 564-5546ext 3244

FAX: (757) 444-3820

LT Michael Dodick

AIM-9X Operational Test Director
OPTEVFOR, VX-9
dodickm@vx9.chinalake.navy.mil

COMM: (760) 939-3659

DSN: 437-3659

FAX: (760) 939-5170

CW04 Frank Nittinger

AIM-9X Operational Test Project Manager
OPTEVFOR, VX-9
nittingf@vx9-1.chinalake.navy.mil

COMM: (760) 939-4930

DSN: 437-4930

FAX: (760) 939-7310

Mr. Kurt Gustafson

Ordnance Technologist (RSP Development)
NAVEODTECHDIV601E
gustafso.eodtc@eodmgate.navsea.navy.mil

COMM: (301) 744-6893

DSN: 354-6893

FAX: (301) 744-6945

GMCM Michael Perdun

Assistant OIC, EOD Fleet Liaison
NAVEODFLTLAU
perdun@eodpoe2.navsea.navy.mil

COMM: (301) 744-6828

DSN: 354-6828

FAX: (301) 744-6944

LT Jim Turner

EOD Curriculum Officer
NAVSCOLEOD CIS
turnerj@eglin.af.mil

COMM: (850) 882-9087

DSN: 872-9087

FAX: (850) 882-9519

CW04 Steven Bebow

EOD Weapons Acquisition and Training Aids Acquisition
NAVSCOLEOD CIS
bebow@eglin.af.mil

COMM: (850) 882-2914

DSN: 872-2914

FAX: (850) 882-2925

PART VII - POINTS OF CONTACT

NAME / FUNCTION / ACTIVITY, CODE / INTERNET EMAIL

TELEPHONE NUMBERS

LT John Drennen

Training Officer
EODTEU ONE

COMM: (619) 524-6669 ext. 105

DSN: 524-6669ext 105

FAX: (619) 524-6670

MSgt Kevin Siemon

Ordnance Chief
MAWTS-1 ORD
siemonkr@mawts1.usmc.mil

COMM: (520) 341-3583

DSN: 951-3583

FAX: (520) 341-5683

Mr. Walt Murphy

AIM-9X Operations & Support (Training)
Raytheon Company
wpmurphy@west.raytheon.com

COMM: (520) 794-5863

DSN: NA

FAX: (520) 794-0314

Mr. Ron Palmer

AIM-9X Operations & Support (Lead)
Raytheon Company
rjpalmer@west.raytheon.com

COMM: (520) 794-1694

DSN: NA

FAX: (520) 794-0314

Mr. Don Holbrook

AIM-9X Operations & Support (System Safety)
Raytheon Company
drholbrook@west.raytheon.com

COMM: (520) 794-1680

DSN: NA

FAX: (520) 794-0314

Mr. Kris Lockwood

AIM-9X Operations & Support (Technical Manuals)
Raytheon Company
kjlockwood@west.raytheon.com

COMM: (520) 794-4998

DSN: NA

FAX: (520) 794-0314 (fax)

Mr. Steve Doppes

AUR Inventory Manager
NALC41A
doppessd@nalc.navy.mil

COMM: (717) 605-2133

DSN: 430-2133

FAX: (717) 605-3833

Mr. Joe Dysinger

Supply Support
NAVICP, 05834.11
joseph_b_dysinger@icpmech.navy.mil

COMM: (717) 605-5866

DSN: 430-5866

FAX: (717) 605-7317

Mr. Bruce Kaiser

Technical Training Support (NTSP Author)
SMT, Inc. Sr. Engineer
bkaiser@smt-i.com

COMM: (703) 294-6448 ext. 11

DSN: NA

FAX: (703) 294-6443

SUMMARY OF COMMENTS

ON THE

AIM-9X SIDEWINDER

DRAFT NAVY TRAINING SYSTEM PLAN

N88-NTSP-A-50-9601A/D

APRIL 2000

Prepared by: NAVAIR PMA205-3J
Contact at: (301) 757-8104
Date submitted: 9 August 2000

COMMENTS / RECOMMENDATIONS ON THE
AIM-9X SIDEWINDER
DRAFT NAVY TRAINING SYSTEM PLAN
TABLE OF CONTENTS

Commander, Naval Air Force, U.S. Atlantic Fleet (COMNAVAIRLANT) N85.....	1
Director of Naval Training N75K	20
Commander, Naval Air Force, U.S. Pacific Fleet (COMNAVAIRPAC) N422F0	20
Commanding General, Marine Corps Combat Development Command (MCCDC) C5323D	20
Naval Air Maintenance Training Unit (NAMTRAU) 4033	21

COMMENTS / RECOMMENDATIONS ON THE

AIM-9X SIDEWINDER

DRAFT NAVY TRAINING SYSTEM PLAN

ACTIVITY NAME: Naval Air Force, U.S. Atlantic Fleet

COMMENT: Executive Summary. Do not concur with fifth paragraph. Table 2-2-1 of Volume I of OPNAVINST 8000.16 sets policy for fleet intermediate functions for air-launched missiles. There is no provision in Table 2-2-1 to accomplish the maintenance tasks on the AIM-9X and associated container that are currently described in ALSP MS-371 DTD May 2000 Rev A/R (draft). The AIM-9X maintenance plan requires fleet maintenance actions that are not authorized on the AIM-9M or any other air-launched guided missile and associated container. New skills are required of NEC 6801. Also, Table 2-2-1 does not include the new on-aircraft BIT skill required of the O-level by ALSP MS-371 DTD May 2000 Rev A/R (draft).

INCORPORATED: No

REMARKS: AIM-9X is not addressed in OPNAVINST 8000.16 yet because it is still in development and will not begin fielding until FY03. AIM-9X is an air-launched missile. See OPNAVINST 8000.16 Volume 2, Figure 1-2-1, Organizational Level Operational and Maintenance Requirements and Figure 1-3-1, Intermediate Level Maintenance Responsibilities for appropriate similar maintenance tasks. Maintenance tasks for AIM-9X are similar to AIM-9M and AIM-120 and do not drive any new skill requirements for any impacted NEC or MOS. The AIM-9X container is similar to the AIM-120 container. BIT and reprogramming skills for AIM-9X include use of a ruggedized laptop computer, and the interface is far less sophisticated than CAIMS, AWARS, or any other ordnance-related information system. With regard to on-aircraft BIT, please see the F/A-18 loading manual, A1-FA18AE-LWS-000, Chapter 21 for post-load, on-aircraft BIT procedures for AIM-120.

COMMENTS / RECOMMENDATIONS ON THE

AIM-9X SIDEWINDER

DRAFT NAVY TRAINING SYSTEM PLAN

COMMENT: Executive Summary. Do not concur that AIM-9X I-level maintenance skills can be taught in Air-Launched Missile I-Level Maintenance Course (CIN C-646-3111) without extending the length of the course. Considerable laboratory time will be required and AIM-9M must continue to be part of the curricula until phased out of the inventory. In addition, AIM-9X requires the co-introduction of the LAU-7D/A and the Strike Arm Intermediate Maintenance Course (CIN C-646-XXXX).

INCORPORATED: No.

REMARKS: This will be the decision of the OPNAV/CNET MTRR for the 700/900 Work Centers, which includes the C-122-3111 and C-646-3118 courses. Next MTRR for 700/900 Work Centers is scheduled in FY02.

COMMENT: Part I.E.3.a (1). Revise to include the status of OT-IIA that was planned for completion during the second quarter of FY 00.

INCORPORATED: Yes.

REMARKS: AIM-9X firings by VX-9 and 422nd TES have been included.

COMMENT: Part I.G does not contain a physical description of the training (shooter) missile, the CATM, the DATM, the tactical rocket motor, the peculiar launcher (LAU-7D/A), or the AUR container. Add a description of each. Revise Part I.G.1.b to show DSU-36/B and DSU-37/B. Expand Part I.G.1.d to identify the PSS model number as WPU-17/B.

INCORPORATED: Partial - Part I.G.1.b revised to show DSU-36/B and DSU-37/B. Part I.G.1.d revised to identify the P/SS model number as WPU-17/B. Part I.G.4.c added for CNU-609/E. I.H.4.b.(1) expanded description of CATM. I.H.4.b.(2) expanded description of DATM.

REMARKS: LAU-7D/A, CATM and DATM descriptions are provided in appropriate sections per Navy Training Requirements Documentation Manual, OPNAV P-751-1-9-97. For LAU-7D/A see I.G.4.b. For CATM see I.H.4.b.(1). For DATM see I.H.4.b.(2). The tactical rocket motor is part of the Propulsion/Steering Section (P/SS), which is described in I.G.1.d. Training (shooter) missile will be described as that configuration and more information become available.

COMMENTS / RECOMMENDATIONS ON THE

AIM-9X SIDEWINDER

DRAFT NAVY TRAINING SYSTEM PLAN

COMMENT: Part I.G.4.a does not agree with the guidance in paragraph 4.3.8.2 of the AIM-9X ALSP. Only the F/A-18C/D and the F-15C/D will be AIM-9X capable, initially.

INCORPORATED: No.

REMARKS: The F-16C/D, F/A-18E/F, and F-22 programs have begun AIM-9X integration engineering and testing.

COMMENT: Do not concur with Part I.H.2 paragraphs 3.6.1.1 and 3.6.1.2 of the AIM-9X ALSP identify those maintenance tasks to be assigned to the O and I Level, respectively. Some of these maintenance tasks are beyond that authorized in Table 2-2-1 of the NOMMP, and exceed that of AIM-9M. Recommend revise Part I.H.2 accordingly, to reflect the additional maintenance tasks and attendant workload.

INCORPORATED: No.

REMARKS: AIM-9X is an air-launched missile. See OPNAVINST 8000.16, Volume 2, Figure 1-2-1, Organizational Level Operational and Maintenance Requirements and Figure 1-3-1, Intermediate Level Maintenance Responsibilities for appropriate similar maintenance tasks. AIM-9X maintenance tasks will be incorporated into these figures following development and prior to fielding in FY03. Maintenance tasks for AIM-9X are similar to AIM-9M and AIM-120 and do not drive any new skill requirements for any impacted NEC or MOS.

COMMENTS / RECOMMENDATIONS ON THE

AIM-9X SIDEWINDER

DRAFT NAVY TRAINING SYSTEM PLAN

COMMENT: Part I.H.2.b. Revise the first sentence to show that the Weapons Department, not the 700 Work Center, maintains guided missiles in the Navy. Add the maintenance concept for the CATM/DATM-9X, the CNU-609/E, and the LAU-7D/A launcher to Part I.H.2

INCORPORATED: Partially – the maintenance concept for the DATM-9X (solely a school house asset), and the CNU-609/E have been added.

REMARKS: The 700 Work Center is part of the Weapons Department. The 700 Work Center is used as a general Work Center to cover other Work Centers that include the 6801 NEC. The MTRR that governs the update of the C-122-3111 course is the W/C 700/900 MTRR. The maintenance concept for the CATM is addressed in I.H.2, which is the same as the tactical AUR. The maintenance concept for the LAU-7D/A launcher is the same as the LAU-7A/A and is addressed in I.H.2.a.(2) and I.H.2.b.(2).

COMMENT: The NTSP does not identify an initial training requirement for either the LAU-7D/A launcher or the AN/GYQ-79 CMBRE. The NTSP only acknowledges the CMBRE “has been fielded.” No known formal training is in place or planned for the CMBRE since no supporting NTSP has been developed. If that formal training is not/will not be identified in any other logistic document, then the AIM-9X NTSP must identify that training. COMNAVAIRLANT will not accept the AIM-9X BIT/reprogramming (B/R) without formal training.

INCORPORATED: No.

REMARKS: Initial training for the AIM-9X is detailed in III.A.1, which includes AIM-9X/LAU-7D/A Release and Control Checks on the F/A-18C/D Aircraft and AIM-9X Off-Aircraft BIT and Reprogramming Procedures. Further initial training for the LAU-7D/A will be implemented as part of the F/A-18C/D Digital Wing Tip Modification (see I.J.4.a.(2).(a) for more information), which will include the Engineering Change Proposal (ECP) for the LAU-7A/A among others. When the ECP is developed, training impacted by the ECP will be identified, budgeted and scheduled accordingly.

COMMENTS / RECOMMENDATIONS ON THE

AIM-9X SIDEWINDER

DRAFT NAVY TRAINING SYSTEM PLAN

COMMENT: Recommend verify the statement in Part I.H.2.b (2) that LAU-115A/A and LAU-127A/A will be used for Navy carriage and launch of the AIM-9X missile on the F/A-18C/D aircraft.

INCORPORATED: No.

REMARKS: LAU-127A/A requires installation of the LAU-115A/A for use on the F/A-18C/D aircraft. AIM-9X compatibility with the LAU-127A/A is currently a requirement.

COMMENTS / RECOMMENDATIONS ON THE

AIM-9X SIDEWINDER

DRAFT NAVY TRAINING SYSTEM PLAN

COMMENT: Do not concur with Part I.H.3 manning concept for Navy I Level activities. SHOROC and CV/CVN manning documents are not based upon a “total ordnance workload.” COMNAVAIRLANT is unable to define that term. The ALSP assigns new maintenance tasks beyond that currently authorized for AIM-9M. These additional maintenance and B/R tasks will require additional manpower in Condition I and III afloat. Manpower requirements for the AIM-9X cannot be based solely upon the captive carriage requirements of the T/M/S T&R manuals. No provision is made in the NTSP for the additional manpower required to accomplish missile and container maintenance, launcher maintenance, and B/R. Part I.H.3.a indicates 3 Aviation Ordnancemen must be dedicated to CATM-9 tasks on a permanent basis. Current I Level manning will not permit that luxury.

INCORPORATED: No.

REMARKS: Regardless of the method or terminology used in CV/CVN and shore activity manning documents to determine manpower levels, the AIM-9X Operational Requirements Document (ORD) placed a constraint on the program not to increase existing manpower levels. The AIM-9X manpower and skill analysis used the AIM-9M and AIM-120 missiles as Baseline Comparison Systems (BCS). Either of these BCS has more maintenance functions than the AIM-9X. AIM-9X has wings and fins attached while in the container, eliminating O- and I-level tasks to breakout, transport, and assemble them. AIM-9X has an internal cryogenic engine, eliminating the O- and I-level tasks associated with the Nitrogen Receiver Assemblies used to provide cooling gas to the AIM-9M. AIM-9X has post-load BIT requirement like the AIM-120, as well as reprogramming requirements like AGM-88 HARM, AIM-120 AMRAAM, and AGM-154 JSOW. Manpower levels required to breakout and maintain air-launched missiles on aircraft carriers is identified in the appropriate Total Ship NTSP and Ship Manning Document. It is determined by a combination of variables, including Carrier Air Wing ordnance requirements and aircraft carrier space constraints. Based on the amount of air-launched missiles that can be loaded at any one time on the three F/A-18 squadrons deployed aboard an aircraft carrier and on the space available on board aircraft carriers to store air launched missiles, there is not enough supporting evidence to request manpower increases in these environments.

COMMENTS / RECOMMENDATIONS ON THE

AIM-9X SIDEWINDER

DRAFT NAVY TRAINING SYSTEM PLAN

COMMENT: Part I.H.4 is incorrect. The NAMP does not establish any airborne weapons maintenance policy.

INCORPORATED: No.

REMARKS: Training for related personnel, such as AT 8342 who may perform AIM-9X release and control checks on the F/A-18C/D aircraft, is based on OPNAVINST 4790.2. See I.H.2.a.(2). Additionally, OPNAVINST 4790.2 drives the Maintenance Training Improvement Program (MTIP).

COMMENT: Instead of a core/strand philosophy in the third paragraph of Part I.H.4, recommend describe the AIM-9X related O/I-Level maintenance skills that are provided through AO-A1 school core/strand training. The fleet is familiar with the concept of core/strand and that concept does not need to be repeated in this NTSP.

INCORPORATED: No.

REMARKS: This paragraph is a “standardized” description placed in the document by AIR-3.4.1. AO “A1” School will determine, via the OPNAV/CNET MTRR process, which AIM-9X topics it will incorporate into its curricula. Based on their existing curricula, it is anticipated that procedures for AIM-9X unpacking/packing, inspections, handling, and loading/unloading will be addressed.

COMMENTS / RECOMMENDATIONS ON THE
AIM-9X SIDEWINDER
DRAFT NAVY TRAINING SYSTEM PLAN

COMMENT: Part I.H.4.a. The term “NAST” is too generic. The NTSP must identify those specific activities/billets that have received initial training. COMNAVAIRLANT requires all assigned F/A-18/I-Level FWST members receive initial AIM-9X missile, LAU-7D/A launcher, and AIM-9X B/R training. In addition, NAS Oceana and the first two deploying CV/CVN ships’ Weapons Department and AIMD, the airwing staff and F/A-18 squadrons of the first two deploying airwings, the OHSAT, and the FASOTRAGRULANT MOTT must receive initial training. Request revise the NTSP to reflect these training requirements.

INCORPORATED: Partially –FWST personnel have been added in I.H.4.a.

REMARKS: FWST personnel will receive training during training events in OPEVAL held at VX-9 and designated participating aircraft carriers. They may also attend any initial training events identified in III.A.1. Deploying F/A-18 squadron personnel will receive training during squadron work up cycles at Strike Fighter Weapon Schools. Deploying aircraft carrier personnel are identified in III.A.1, which will be updated as aircraft carrier deployment schedules for FY03 and beyond are available and as AIM-9X load outs are planned by AMMOPAC and AMMOLANT.

COMMENT: The second paragraph of Part I.H.4.a indicates initial training will be provided 6 months prior to IOC. The ALSP indicates IOC is planned for the third quarter, FY03. Recommend the NTSP be revised accordingly. In addition, the second paragraph indicates the “NAST” will use/modify the contractor provided training material for incorporation into the applicable formal schools. The list of courses the contractor is tasked with providing (paragraph 4.3.5.1 of the ALSP) does not include all of the topics necessary to stand up formal O and I-Level fleet training. The activity that will develop the initial O/I-Level training topics that are not in the scope of topics to be delivered by the contractor must be identified.

INCORPORATED: Partially – IOC identified as third quarter FY03.

REMARKS: IOC is a moving target based on sufficient AIM-9X inventory to fulfill CV/CVN load out requirements and the F/A-18C/D Digital Wingtip modification schedule. All schools impacted by AIM-9X are identified in the NTSP and will participate in DT/OT training events to ensure that the material/information meets their needs.

COMMENTS / RECOMMENDATIONS ON THE

AIM-9X SIDEWINDER

DRAFT NAVY TRAINING SYSTEM PLAN

COMMENT: COMNAVAIRLANT desires initial training for CV/CVN ships be accomplished on board during an in-port period rather than ashore as shown in Part I.H.4.a. Part III.A.1 refers.

INCORPORATED: Partially – note added to Part III.A.1.

REMARKS: I.H.4.a states that USN and USMC instructors will be provided initial training six months prior to IOC, while squadron and ship's company will receive initial training prior to aircraft carrier deployment. This paragraph as well as III.A.1 does not stipulate whether training will be accomplished on board ship or ashore. Every effort will be made to accommodate COMNAVAIRLANT's desire for initial training to occur on board ship during the in-port period, however, recent events in the JDAM, JSOW and SLAM-ER programs have shown that certain circumstances dictate training to occur while the aircraft carrier is en route or already deployed. Because of these possible shifts to achieve capability in an abbreviated fashion, or to conduct special operational testing in theater, and other mitigating circumstances, it is better to leave the description as it is currently stated.

COMMENT: Part I.H.4.b (2) does not include the twelve Aviation Ordnance Trainers (Device 3B64) used at AO-A1 school. This training device may require upgrade for AIM-9X. Part I.H.4.b (2) A note should be inserted in Part I.H.4.b (2) (a) to show the CATM-9X will satisfy the handling and loading training requirement at the squadron O level.

INCORPORATED: Partially – statement added regarding use of training device 3B64 at AO "A1" School and statement added to reflect that CATM will support O-level squadron training.

REMARKS: Training device 3B64 does not replicate the F/A-18C/D aircraft and should not require modification. This issue should be pursued via the AO "A1" School MTRR.

COMMENTS / RECOMMENDATIONS ON THE

AIM-9X SIDEWINDER

DRAFT NAVY TRAINING SYSTEM PLAN

COMMENT: Paragraph 4.4.2/4.4.3 of the ALSP and Parts I and IV of the NTSP show the AN/GYQ-79 CMBRE and the CRALTS as required training equipment, but peculiar cable(s) are not adequately described in terms of source or distribution method. Will the peculiar cables be added by test set SEC or be added as IMRL material? The source and distribution method for the 315-ASX AC Power Source required in the I-Level schools must be identified. The source and distribution method for the CMBRE training MAP must be identified.

INCORPORATED: Partially.

REMARKS: Cables for CRALTS will be provided via SEC, while cables for AIM-9X TPS (CMBRE interface) include cables and are being procured by PMA259 – statements added. The 315-ASX has being procured by the JDAM program – source is identified as Pacific™ and distribution is via the JDAM program Office, PMA-201. CMBRE Training Map source (RMS)/distribution (PMA259/PMA205) added.

COMMENT: Part I.H.4 shows the AWM-100 (modified) as required O-Level TTE. Data from PMA-260 indicates AWM-103 (COAST) will replace AWM-100 (modified), AWM-100, AWM-101, and ASM-464 test sets. Although not included in the NTSP, the AWM-102 replaces the AWM-54 test set. Recommend revise Parts I and IV accordingly.

INCORPORATED: Partially – statements added to I.G.4.b.(1), I.H.4.b.(2)(b), and I.H.4.b.(3)(b).

REMARKS: The AIM-9X program can only address the current plan. Statement added. When COAST replaces the AN/AWM-100, it will be addressed in the appropriate platform NTSP, e.g., F/A-18C/D NTSP, and the CRALTS NTSP, and updated in this NTSP.

COMMENT: In view of the TTE discrepancies identified above, recommend PMA-205 reevaluate TTE requirements and ensure all required TTE, the allowancing method, the individual activities requiring the equipment, and the activity responsible for providing the equipment to meet initial training are clearly identified in the NTSP and the ALSP.

INCORPORATED: No.

REMARKS: See previous remark.

COMMENTS / RECOMMENDATIONS ON THE

AIM-9X SIDEWINDER

DRAFT NAVY TRAINING SYSTEM PLAN

COMMENT: Part I.H.4.b identifies operator courses, AOA1 courses, no O-Level courses or training tracks, I-Level training tracks only, and EOD courses. For consistency, revise Part I.H.4 to identify the primary training tracks affected and the courses within each track that require AIM-9X update/revision, while referring the reader to Figures I-2 through I-6.

INCORPORATED: Yes – I-level courses now shown vice training tracks. References added to Figures I-2 through I-7.

REMARKS: I.H.4.b identifies courses for operator, initial maintenance skills, O-level maintenance, I-level maintenance courses with minimal impact, I-level tracks impacted, and EOD schools. Training tracks were cited for I-level courses only – now cited as courses.

COMMENT: Liaison with PMA-260 indicates a SEC will be issued to eliminate the gel-pads on the ADU-514A/E Adapter required to transport the AIM-9X missile. There is no discussion in the NTSP of the ADU-514A/E Adapter, or any other AWSE used to transport AIM-9X.

INCORPORATED: No.

REMARKS: This change was not driven by AIM-9X and will be implemented prior to AIM-9X IOC. PMA205 has coordinated the referenced preliminary SEC with Strike Fighter Weapon Schools, AO “A1” School and NAMTRAGRU to ensure that they request and receive the kits. AIM-9X will use existing SE without the need for any modification. Appropriate SERDs and SE technical manuals are being updated to reflect AIM-9X requirements/procedures.

COMMENT: There is no Part I discussion of facilities. Ship alterations 8734 and 8735 are required to be accomplished on CV/CVN ships to support AIM-9X B/R using CMBRE.

INCORPORATED: No.

REMARKS: Referenced ship alterations are being driven by JDAM, JSOW, and AMRAAM programs and will be accomplished prior to AIM-9X IOC.

COMMENTS / RECOMMENDATIONS ON THE

AIM-9X SIDEWINDER

DRAFT NAVY TRAINING SYSTEM PLAN

COMMENT: Part I.H.4.d identifies OATMS as a source of training tracks. OATMS access is restricted by OPNAV.

INCORPORATED: No.

REMARKS: Please contact N881/N889 to pursue this issue further. OPNAV requires this statement in the document.

COMMENT: Revise Part I.I.1.a to show whether AIM-9X question banks have been developed, and if not, what command is tasked with developing AIM-9X related MTIP question banks.

INCORPORATED: Yes.

REMARKS: Additionally, will coordinate with AMTCS program to ensure that AIM-9X program complies with their system and update the NTSP accordingly.

COMMENT: Revise Part I.I.1.b to identify the “QUAL/CERT Record” as the replacement for EJT.

INCORPORATED: No.

REMARKS: Electronic Training Jacket (EJT) will contain electronic tracking or reference of hardcopy QUAL/CERT Records. Neither EJT nor QUAL/CERT Record will be replaced by the other. Statement added to reflect electronic tracking of QUAL/CERT Records.

COMMENT: Add the Explosive Handling Qualification and Certification Program to Part I.I.3. Add COMNAVAIRLANTINST 3500.85 to Part I.I.3.b as a reference for CWTPI policy and procedure.

INCORPORATED: Partially.

REMARKS: Explosive Handling Qualification and Certification Program added to Part I.I.3 per OPNAVINST 8020.14/MCO P8020.11. Reference to TYCOM policy and procedure added to I.I.3.b, CWTPI.

COMMENTS / RECOMMENDATIONS ON THE

AIM-9X SIDEWINDER

DRAFT NAVY TRAINING SYSTEM PLAN

COMMENT: Expand Part I.J to include a discussion of the ALSP and OLSP. The three paragraphs in Part I.J offer little or nothing to the NTSP.

INCORPORATED: No.

REMARKS: A reference to the ALSP already exists. OLSP does not exist. In the future a reference will be added if an OLSP (or ULSS) is generated. This document is a training plan, not a logistics plan for the AUR, and only addresses logistics as it pertains to training equipment.

COMMENT: Revise Parts I.J.4.a and IV.A.1 to include the AWM-102 and AWM-103 only.

INCORPORATED: Partially – statements added in I.J.4.a regarding potential use of AN/AWM-103.

REMARKS: The AIM-9X program can only address the current planning and direction, which is the Digital Wing Tip modification for the F/A-18C/D, which will drive the AN/AWM-100 modification. When the AN/AWM-102 and AN/AWM-103 become part of the AIM-9X program direction, the NTSP will be updated to reflect them.

COMMENT: Revise Parts I.J.4.a and IV.A.1 to include the training TPS and the 315-ASX AC Power Source for CMBRE. Discuss the security requirements for safeguarding the AIM-9X CMBRE TPS.

INCORPORATED: Partially –A statement was added to describe the classified nature of the tactical BIT/reprogramming procedure.

REMARKS: The training for the AIM-9X TPS is contained within the off-aircraft BIT/reprogramming procedures topic, while training for the 315-ASX power source is covered in the JDAM program and associated technical manuals.

COMMENTS / RECOMMENDATIONS ON THE

AIM-9X SIDEWINDER

DRAFT NAVY TRAINING SYSTEM PLAN

COMMENT: In Part I.J.5, identify what document will promulgate repair parts allowances, and what repair capability will be assigned to the schools hosted by shore stations that have no repair capability for the TTE and TD required to teach AIM-9X.

INCORPORATED: No.

REMARKS: Remove and replace items are taught at I-level schools, which have capability to teach and perform these repair functions. Repair parts are procured through the normal supply system using OPTAR funding (unless an 8E Cog item). If repair is beyond the capability of the school, the TTE/TD will be coordinated through the program office.

COMMENT: Recommend Parts I.J and I.L be used to document the sources and delivery plans for the test equipment discussed in paragraphs 1.s and 1.cc above and identified in Part IV.A.1 as "GFE."

INCORPORATED: No.

REMARKS: Sources are already identified. There are no GFE/CFE training requirements.

COMMENT: Too little data is provided in Part I.K.1.a for the CATM/DATM missiles and TTE/TDs required to facilitate initial and follow-on training. Although this data may not be currently available, a list of the equipment, responsible activity, and required delivery dates to facilitate planned IOC in the third quarter, FY03, should be added in both Part I.K, I/L, V and VI.

INCORPORATED: Partially – tables added.

REMARKS: It is stated several times throughout the document that the contractor has been contracted to produce and deliver the training devices and AIM-9X TPS. PMA259 has the management oversight to see that this is carried out and shipped to the appropriate training activity. Ready for Training (RFT) dates and required dates are listed in part IV and V.

COMMENTS / RECOMMENDATIONS ON THE
AIM-9X SIDEWINDER
DRAFT NAVY TRAINING SYSTEM PLAN

COMMENT: Add NAVSTA Roosevelt Roads to the Fleet Support list in Part II.A.1.a.

INCORPORATED: Yes.

REMARKS:

COMMENT: Do not concur with the format in Part II.A.1.b. Show only those commands that are listed in Part II.A.1.a.

INCORPORATED: No.

REMARKS: This has been an on-going discussion between AIR-3.4.1 and PMA205-3J/H. The intent of Part II of the NTSP is to identify manpower requirements and use it to calculate Adjusted Annual Training Input Requirements (ATIR) for initial and follow-on training courses. AIR-3.4.1 maintains that weapons NTSPs impact I-level maintenance courses only, i.e., C-122-3111, C-646-3118, and C-646-3105, or their associated training tracks, i.e., D/E-646-7007, D/E-646-7001, and M-646-7026, respectively, and thus the manpower shown in Part II should support the Adjusted ATIR calculations. This philosophy dictates that the entire community of affected ratings/NECs/MOS be listed in Part II, regardless if their activity never receives the subject weapon. PMA205-3J/H maintains that, because the affected courses/training tracks are already established and Adjusted ATIR calculations have been replaced with NITRAS data, Part II should be used to identify the affected ratings/NECs/MOS at impacted activities only, i.e., activities receiving the subject weapon. This data is more useful to the resource, acquisition, and support managers, and when analyzed collectively for all weapons, may be able to support manpower shortages at individual activities. The compromise that PMA205-3J/H and AIR-3.4.1 have struck is that II.A.1.a will list affected activities and that II.A.1.b and the subsequent summaries will list the entire community of affected ratings/NECs/MOS.

COMMENTS / RECOMMENDATIONS ON THE

AIM-9X SIDEWINDER

DRAFT NAVY TRAINING SYSTEM PLAN

COMMENT: Part III.A.1 does not include initial training for the LAU-7D/A launcher I Level training. The extent/topics of the O Level and I Level initial training cannot be determined from either Part III.A.1 or from Part I.H.4. Without that information, COMNAVAIRLANT cannot determine the effectiveness of the NTSP.

INCORPORATED: No.

REMARKS: Course C-646-3118 has been identified in the document. Further, there are repeated discussions regarding the Digital Wing Tip modification and the associated equipment ECPs.

COMMENT: Parts I and III do not address how initial training will be provided beyond IOC if follow-on training has not been stood up. This information is considered critical since follow-on training is rarely available at IOC and/or fleet activities cannot send personnel to the formal school for the entire course.

INCORPORATED: No.

REMARKS: Follow-on training will be stood up on time. Initial training for Weapons Department personnel will be available beyond the IOC date and will include participation by the FWST. Additionally, stand-alone training, e.g., AIM-9X, LAU-7D/A, will be available upon request through NAMTRAGRU headquarters.

COMMENT: Revise TTE/TD requirements in Part IV to reflect the changes and revisions identified above.

INCORPORATED: No.

REMARKS: The present direction for the AIM-9X program is to integrate AIM-9X on the F/A-18C/D aircraft via OFP 15C/17C and the Digital Wing Tip modification. Unless COMNAVAIRLANT has authority to change ASN(RDA) direction, PMA259 cannot accept this comment.

COMMENTS / RECOMMENDATIONS ON THE

AIM-9X SIDEWINDER

DRAFT NAVY TRAINING SYSTEM PLAN

COMMENT: In Part IV.A.1 on page IV-2 under MTU-4030, verify the item numbers shown for the CMBRE and the power supply are correct.

INCORPORATED: No.

REMARKS: See Navy Training Requirements Documentation Manual, OPNAV P-751-1-9-97.

COMMENT: Part IV.A.2 indicates the FRS and weapons schools require CATMs in FY02 although IOC is not planned until FY03. CATMs will be required when NAVAIR issues flight clearance authorized carriage. Part IV.A.2 indicates all potential users require CATMs on the RFT date. The ALSP indicates CATMs will be provided over a period of several years. Request clarify.

INCORPORATED: N/A

REMARKS: Because it is not known at present which CV/CVN and associated CVW will be deploying with AIM-9X, all schools and operational F/A-18C/D squadrons have been identified with an RFT date of FY03. The date required for schools was then increased by six months prior to the projected IOC date, making the year FY02. This table will be updated before IOC to reflect more accurate planning data when it becomes available and when it is practical to do so. The CATM-9X delivery schedule is discussed in I.K and will be updated following LRIP contract award. CATM-9X production will begin in FY01 with initial deliveries beginning in FY02, and will remain in production beyond FY08. Also, COMNAVAIRLANT and COMNAVAIRPAC will be able to direct CATM-9X assets to operational squadrons as deemed appropriate.

COMMENT: Request verify that all DATMs identified in Part IV.A.2 will be in the schoolhouse hands in time for initial training, or at least for follow-on training. CATM/DATM must be available for planned initial training.

INCORPORATED: N/A

REMARKS: Current LRIP contract planning schedules indicate that DATMs will be available at schools prior to IOC.

COMMENTS / RECOMMENDATIONS ON THE

AIM-9X SIDEWINDER

DRAFT NAVY TRAINING SYSTEM PLAN

COMMENT: Recommend verify the man-weeks of training services identified in Part IV.b.1. The extent of new training over and above AIM-9M should take much longer to develop and incorporate.

INCORPORATED: N/A

REMARKS: Verified during DT/OT training events. Training packages will be “plug & play” and coordinated via the appropriate MTRRs in FY02.

COMMENT: Part IV.B.2 indicates that only “1 set” of curricula material and training aids will be provided to each school. Nowhere in the NTSP is this “1 set” defined as to content.

INCORPORATED: Yes.

REMARKS: Footnote added to define Training package as Lesson Plan, Trainee Guide, Student Handbook, and Visual Aids.

COMMENT: Is the AIM-9X CMBRE Embedded Training PC Card identified in Part IV.B.2 a training aid or TTE/TD?

INCORPORATED: N/A

REMARKS: The AIM-9X CMBRE Embedded Training PC Card is identified in Part IV.B.2 as a training aid. Although delivered on a Personal Computer Memory Card International Association (PCMCIA) cards, it could be delivered on a CD-ROM, but in order to maximize training benefit, it is delivered on PCMCIA cards and used with CMBRE, AIM-9X TPS, and DATM-9X. In this capacity, it is considered “embedded training”.

COMMENTS / RECOMMENDATIONS ON THE

AIM-9X SIDEWINDER

DRAFT NAVY TRAINING SYSTEM PLAN

COMMENT: Parts III, IV of this NTSP list all Navy and Marine Corps F/A-18A/B/C/D squadrons, vice only F/A-18C/D squadrons that will be AIM-9X capable per Part I.E and the ALSP. LANTFLT F/A-18C/D squadrons include VFA-86/81/82/87/15/37/106/105/131/136, VFMAAW-224/332/533, VFMA-251. Recommend PMA-205 verify the complete list of F/A-18C/D squadrons with PMA-265.

INCORPORATED: N/A.

REMARKS: Verified with Resource Sponsor, N880C7.

COMMENT: Part IV.B.3 is missing numerous critical publications that are required to both develop and facilitate Aim-9X training. COMNAVAIRLANT is concerned that the formal training will be limited to only those publications and directives listed in Part IV.B.2. Most strongly recommend the following directives be included in course curricula development and in the classroom: OPNAVINST 8000.16, NAVAIR 01-1A-75, 11-1-116, 11-19-100.1.1, 11-140-6.1-2, 11-140-24, 11-140-25, 16-1-529, NAVSEA SG420-BA-WHS-010/CV-CVN, SW020-AC-SAF-010/020/030/040, MILSTD 1323 for AIM-9X, the ULSS, ILSP, and ALSP. Note that NAVAIR 19-95-1 is obsolete.

INCORPORATED: No.

REMARKS: Manuals that are impacted and will contain AIM-9X procedural information are identified vice manuals that contain references to AIM-9X only.

COMMENT: There is no Part IV.C discussion of facilities. Ship alterations 8734 and 8735 are required to be accomplished on CV/CVN ships to support AIM-9X B/R using CMBRE.

INCORPORATED: No.

REMARKS: Referenced ship alterations are being driven by JDAM, JSOW, and AMRAAM programs and will be accomplished prior to AIM-9X IOC.

**COMMENTS / RECOMMENDATIONS ON THE
AIM-9X SIDEWINDER
DRAFT NAVY TRAINING SYSTEM PLAN**

ACTIVITY NAME: Director of Naval Training N75K

COMMENT: Reviewed – concurred without comment.

INCORPORATED: N/A

REMARKS: Includes consolidated review by CNET ETS23.

ACTIVITY NAME: Commander, Naval Air Force, U.S. Pacific Fleet
(COMNAVAIRPAC) N422F

COMMENT: Reviewed – concurred without comment.

INCORPORATED: N/A

REMARKS:

ACTIVITY NAME: Commanding General, Marine Corps Combat Development Command
(MCCDC) C5323D

COMMENT: Reviewed – concurred without comment.

INCORPORATED: N/A

REMARKS:

COMMENTS / RECOMMENDATIONS ON THE

AIM-9X SIDEWINDER

DRAFT NAVY TRAINING SYSTEM PLAN

ACTIVITY NAME: Naval Aviation Maintenance Training Group, Detachment North Island (NAMTRAGRUDET) 4033

COMMENT: Page I-19: Add C-122-3111B to list of impacted courses.

INCORPORATED: Yes.

REMARKS: AIR-3.4.1 changed this following PMA205-3J submission for Fleet comment. Original course listing has been reinstated.

COMMENT: Pages II-44, II-46, III-6, III-7: Instructor billet requirements and student throughput quantities, where did these projected numbers come from?

INCORPORATED: Yes.

REMARKS: AIR-3.4.1 changed this following PMA205-3J submission for Fleet comment. Original course NITRAS data has been reinstated.

COMMENT: Page IV-23: Publication quantity required is 13 vice 8 copies.

INCORPORATED: Yes.

REMARKS:

COMMENT: Page IV-23: Add pubs NA 11-140-25 and OP 2173, Vol. I & II to pubs list.

INCORPORATED: No.

REMARKS: Manuals that are impacted and will contain AIM-9X procedural information are identified vice manuals that contain references to AIM-9X only. A WAM for AIM-9X does not currently exist nor is planned. When program direction changes it will be reflected in an update to this NTSP.